

Environmental Assessment

for the

Construction of a Phase I Surface Deployment and
Distribution Command Transportation Command
Consolidation Facility and a Phase I & II Mobility Air
Force Logistics Support Center



St. Clair County
Scott Air Force Base, Illinois

Prepared for:
375th Civil Engineering Squadron
701 Hangar Road, Building 56
Scott Air Force Base, Illinois 62225

April 2006

| Report Documentation Page | | | | Form Approved OMB No. 0704-0188 | |
|--|------------------------------------|-------------------------------------|--|---|------------------------------------|
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| 1. REPORT DATE APR 2006 | | 2. REPORT TYPE | | 3. DATES COVERED 00-00-2006 to 00-00-2006 | |
| 4. TITLE AND SUBTITLE Environmental Assessment for the Construction of a Phase I Surface Deployment and Distribution Command Transportation Command Consolidation Facility and a Phase I & II Mobility Air Force Logistics Support Center | | | | 5a. CONTRACT NUMBER | |
| | | | | 5b. GRANT NUMBER | |
| | | | | 5c. PROGRAM ELEMENT NUMBER | |
| 6. AUTHOR(S) | | | | 5d. PROJECT NUMBER | |
| | | | | 5e. TASK NUMBER | |
| | | | | 5f. WORK UNIT NUMBER | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Weston Solutions Inc,1400 Weston Way,West Chester,PA,19380 | | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) | | | | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| | | | | 11. SPONSOR/MONITOR'S REPORT NUMBER(S) | |
| 12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited | | | | | |
| 13. SUPPLEMENTARY NOTES | | | | | |
| 14. ABSTRACT | | | | | |
| 15. SUBJECT TERMS | | | | | |
| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT Same as Report (SAR) | 18. NUMBER OF PAGES 123 | 19a. NAME OF RESPONSIBLE PERSON |
| a. REPORT unclassified | b. ABSTRACT unclassified | c. THIS PAGE unclassified | | | |

FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT

PHASE I SDDC TRANSCOM CONSOLIDATION FACILITY AND PHASE I & II MAF LSC SCOTT AIR FORCE BASE, ILLINOIS

AGENCY: 375th Airlift Wing, Scott Air Force Base (AFB), Illinois.

BACKGROUND: According to 2005 Base Realignment and Closure (BRAC) requirements, Scott AFB must provide a joint operations center to house a consolidated Transportation Command (TRANSCOM) to include the Surface Deployment and Distribution Command (SDDC) operations formerly located in Virginia, the planning and analysis components of the United States Air Force Tanker Airlift Control Center (TACC), and the United States TRANSCOM Deployment and Distribution Operation Center (DDOC). Another BRAC requirement establishes the Mobility Air Force Logistics Support Center (MAF LSC) at Scott AFB by realigning Regional Supply Squadron positions from Florida and Germany, as well as Logistics Readiness Squadron positions from Arkansas and Oklahoma. Currently there is no administrative space available at Scott AFB to accommodate these offices. Therefore, the Air Force proposes to construct a temporary TRANSCOM facility (hereafter referred to as the SDDC TRANSCOM facility) as well as temporary and permanent MAF LSC facilities to accommodate inbound personnel.

PROPOSED ACTION: The Air Force proposes to construct a temporary SDDC TRANSCOM facility and associated infrastructure, including a parking lot, as well as temporary and permanent MAF LSC facilities and associated infrastructure. Additionally, 164 military personnel associated with the MAF LSC mission would be relocated to Scott AFB.

ALTERNATIVE A: The Air Force proposes to construct a temporary SDDC TRANSCOM facility and associated infrastructure, including a parking lot, in an alternate location, and construct temporary and permanent MAF LSC facilities and associated infrastructure. This alternative also includes the relocation of a running track. Additionally, 164 military personnel associated with the MAF LSC mission would be inbound to Scott AFB.

ALTERNATIVE B: The Air Force proposes to construct a temporary SDDC TRANSCOM facility and associated infrastructure, including a parking lot, as well as a permanent MAF LSC facility. Construction of a temporary MAF LSC facility would occur in an alternate location. Additionally, 164 military personnel associated with the MAF LSC mission would be inbound to Scott AFB.

NO-ACTION ALTERNATIVE: Under the No-Action Alternative, the temporary SDDC TRANSCOM facility, the temporary MAF LSC facility, the permanent MAF LSC facility, and all associated infrastructure would not be constructed. Also, 164 military personnel would not be relocated to Scott AFB.

SUMMARY OF FINDINGS FOR PROPOSED ACTION:

Air Quality. Temporary increases in equipment and vehicle emissions, fugitive dust, and particulate matter will be generated during construction activities. Emissions will be below *de minimus* thresholds and thus, a conformity determination will not be required. Minor long-term increases in air emissions from motor vehicles operated by the 164 inbound personnel are expected to be negligible when compared to overall regional motor vehicle emissions. No significant impacts are expected.

Noise. Temporary noise impacts will be generated by vehicles and equipment involved in construction activities. Short-duration exposures to noise levels above the ambient daytime noise level at nearby buildings would occur, and annoyances to noise-sensitive receptors (homes) adjacent to the construction locations are expected. These impacts are not expected to be significant.

Wastes, Hazardous Materials and Stored Fuels. Hazardous materials will be managed in compliance with Scott AFB, state, and federal regulations. Potentially contaminated soils encountered during excavation will be stockpiled on-site and disposed of in accordance with appropriate regulations. Any engineered barrier, such as asphalt or a concrete parking lot, constructed at the location of the softball fields will have a positive impact on the site, as this will reduce the potential for human exposure to contaminated soils. No significant impacts are expected.

Water Resources. Construction activities will cause short-term impacts to surface water quality, which will be minimized through implementation of best management practices and a Storm Water Pollution Prevention Plan. Groundwater is not likely to be encountered and no impacts to wetland or floodplains are expected. No significant impacts are expected.

Biological Resources. No significant or unique biological resources occur at the project sites; therefore, no impacts to biological resources are expected.

Socioeconomic Resources. There will be a slight long-term increase in population size and a slight long-term decrease in available off-base housing. Due to the lack of on-base housing, inbound personnel will seek appropriate housing off-base. There will be a slight long-term impact to local schools due to enrollment of 164 additional children. Positive short-term and long-term impacts to the local economy are expected due to construction expenditures and additional families moving to local area. No significant impacts are expected.

Land Use. New administrative areas would be compatible with adjacent land uses; therefore, there would be no impacts to land use.

Utilities and Transportation Systems. Short-term minor impacts to utilities and transportation will include increases in: (1) Solid waste generation from construction activities; (2) soil erosion and sediment loadings in storm water runoff; (3) amount of impervious cover; (4) traffic counts associated with construction activities and construction impact to road surface conditions; and (5) electricity and natural gas consumption. Long-term minor impacts to transportation includes increases in traffic counts and a slight increase in solid waste resulting from the addition of 164 personnel and their families to the installation. No significant impacts are expected.

Safety and Occupational Health. No impacts to the health of occupational and construction workers are anticipated provided that workers comply with a Health and Safety Plan and Emergency Action Plan.

Environmental Management – Pollution Prevention. A short-term increase in recyclable asphalt is expected from construction. Administrative recyclable materials, such as paper and cardboard, are expected to increase once these newly constructed facilities become occupied. No significant impacts are expected.

Geology and Soils. No impact to soils or geological resources is anticipated provided that Phase I and II National Pollutant Discharge Elimination System permits are acquired to minimize soil erosion and that best management practices are implemented.

Environmental Justice. The project sites are neither considered a minority nor a low-income area; therefore, no impacts to environmental justice communities are expected.

SUMMARY OF FINDINGS FOR ALTERNATIVE A:

Impacts associated with this alternative would be the same as those described for the Proposed Action except that (1) there would be a short-term increase in air emissions, soil waste generated from construction, and recyclable asphalt; (2) there would be a decrease in the amount of impervious surface constructed; (3) the child care center and additional buildings would be exposed to short-term elevated noise levels; and (4) there would be a potential short-term adverse impact to recreational walkers/runners/joggers who find alternate, potentially less safe walking/running/jogging routes during construction.

SUMMARY OF FINDINGS FOR ALTERNATIVE B:

Impacts associated with this alternative would be the same as those described for the Proposed Action except that (1) there would be fewer air emissions, less solid waste, less impervious surface constructed, and less recyclable asphalt produced; and (2) more buildings would be exposed to short-term elevated noise levels.

SUMMARY OF FINDINGS FOR NO-ACTION ALTERNATIVE:

Implementation of the No-Action Alternative would result in a potential for human exposure to contaminated soils at the softball fields. Predicted savings of \$1.2 billion over 20 years from BRAC recommendations would not be realized, resulting in a long-term adverse impact on economy. Temporary facilities and associated infrastructure would not be constructed and adequate facility space for the SDDC TRANSCOM Consolidation would continue to be unavailable. Failure to consolidate the SDDC Operations Center with the TACC and the TRANSCOM DDOC would negate the positive effects of the BRAC recommendation and would propagate wasteful redundancy of personnel and communications infrastructure. Adequate space would have to be found via off-base leases, impacting the mission accomplishment of TRANSCOM, and requiring significant work stoppages and alterations as personnel adjust to new and difficult work separations. Force protection and security would not be maintained in such a situation for Headquarters personnel. Long-term adverse impacts to the TRANSCOM mission would be realized.

SUMMARY OF CUMULATIVE IMPACTS: The cumulative impacts of implementing this action along with other past, present, and future projects in the region of influence were assessed in the attached Environmental Assessment (EA) and no significant cumulative impacts were identified.

SUMMARY OF PUBLIC COMMENTS: No public comments were received during the public comment period.

DECISION: Based upon my review of the Environmental Assessment attached and incorporated by reference, and contingent upon implementation of specific mitigation measures regarding historic resources, I conclude that none of the alternatives nor the Proposed Action would have a significant direct, indirect, or cumulative impact upon the environment. Accordingly, the requirements of the National Environmental Policy Act, regulations promulgated by the President's Council on Environmental Quality, and 32 CFR Part 989 are fulfilled and an Environmental Impact Statement is not required at this time.



RAYMOND J. ROTTMAN, Colonel, USAF
Commander

4 MAY 06
Date

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Environmental Assessment

Phase I SDDC TRANSCOM Consolidation Facility and Phase I & II MAF LSC

Prepared For:

**Department of the Air Force
Scott Air Force Base, Illinois**

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Acronyms and Abbreviations

ACRONYMS AND ABBREVIATIONS

| | |
|---------|---|
| ACM | asbestos-containing material |
| AFB | Air Force Base |
| AFI | Air Force Instruction |
| AFMAN | Air Force Manuals |
| AICUZ | Air Installation Compatible Use Zone |
| AMC | Air Mobility Command |
| AOC | Area of Concern |
| AQCR | Air Quality Control Region |
| BGP | Base General Plan |
| bgs | below ground surface |
| BMP | Best Management Practice |
| BRAC | Base Realignment and Closure |
| CAAA | Clean Air Act Amendment |
| CEQ | Council on Environmental Quality |
| CES/CEV | Civil Engineering Squadron/Civil Environmental Flight |
| CFR | Code of Federal Regulations |
| CO | carbon monoxide |
| dB | decibel |
| dB(A) | A-weighted decibel |
| DDOC | Deployment and Distribution Operations Center |
| DoD | Department of Defense |
| DoDI | Department of Defense Instructions |
| EA | Environmental Assessment |
| EIAP | Environmental Impact Analysis Process |
| EIS | Environmental Impact Statement |
| EM | Engineer Manual |
| EMF | Environmental Management Flight |
| EO | Executive Order |
| FONSI | Finding of No Significant Impact |
| FY | Fiscal Year |
| gpm | gallons per minute |
| HRMA | Housing Requirements and Market Analysis |
| IEPA | Illinois Environmental Protection Agency |
| IESPB | Illinois Endangered Species Protection Board |
| IICEP | Interagency/Intergovernmental Coordination for Environmental Planning |
| IGRO | Illinois Groundwater Remedial Objectives |
| ISRO | Illinois Soil Remedial Objectives |
| LBP | lead-based paint |
| LRS | Logistics Readiness Squadron |
| LTA | lighter-than-air |
| MAF LSC | Mobility Air Force Logistics Support Center |
| MFH | military family housing |
| mgd | million gallons per day |
| MSA | Metropolitan Statistical Area |

ACRONYMS AND ABBREVIATIONS (CONT.)

| | |
|-------------------|---|
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NPDES | National Pollutant Discharge Elimination System |
| NO _x | nitrogen oxides |
| O ₃ | ozone |
| OSHA | Occupational Safety and Health Administration |
| PA/SI | Preliminary Assessment/Site Investigation |
| PM10 | particulate matter equal or less than 10 micrometers in aerodynamic diameter |
| PM2.5 | particulate matter equal or less than 2.5 micrometers in aerodynamic diameter |
| ppm | parts per million |
| RCRA | Resource Conservation and Recovery Act |
| RSS | Regional Supply Squadron |
| SDDC | Surface Deployment and Distribution Command |
| SO ₂ | sulfur dioxide |
| SO _x | sulfur oxides |
| SPL | sound pressure level |
| sq ft | square feet |
| SWPPP | Storm Water Pollution Prevention Plan |
| TACC | Tanker Airlift Control Center |
| TACO | Tiered Approach to Corrective Action Objectives |
| TLF | temporary lodging facility |
| tpy | tons per year |
| TO | Technical Orders |
| TRANSCOM | Transportation Command |
| µg/m ³ | micrograms per cubic meter |
| US | United States |
| USC | United States Code |
| USCB | United States Census Bureau |
| USEPA | United States Environmental Protection Agency |
| VOC | volatile organic compound |
| WWTP | wastewater treatment plant |

Executive Summary

EXECUTIVE SUMMARY

The 375th Civil Engineer Squadron proposes to construct a temporary Surface Deployment and Distribution Command (SDDC) Transportation Command (TRANSCOM) facility, temporary and permanent Mobility Air Force (MAF) Logistics Support Center (LSC) facilities, and associated infrastructure for all facilities, in order to fulfill the 2005 Base Realignment and Closure requirements for Scott Air Force Base (AFB), Illinois. Construction of these facilities would provide adequate administrative space at Scott AFB which is not currently available. Additionally, 164 military personnel associated with the MAF LSC mission would be inbound to Scott AFB.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969, the Council on Environmental Quality regulations [40 Code of Federal Regulations (CFR), sections 1500-1508], and Air Force Instruction 32-7061, Environmental Impact Analysis Process, as promulgated at 32 CFR 989. This EA focuses on specific issues and concerns of the proposed and alternative actions that could affect the environment of Scott AFB and the surrounding properties. The range of alternatives includes taking No-Action and implementing the Proposed Action, Alternative A, or Alternative B.

The new facilities would be located in the Major Command Administration Area and Community and Housing Area at Scott AFB on portions of property which are currently maintained for community service and outdoor recreation.

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Chapter 1

Purpose of and Need for Action

CHAPTER 1 PURPOSE OF AND NEED FOR ACTION

This chapter has seven parts: an introduction, a statement of the need for action, a statement of the objective, a description of the scope of the environmental assessment (EA), identification of the decision(s) that must be made, identification of applicable regulatory requirements and required coordination, and introduction to the organization of the document.

1.1 INTRODUCTION

The proposed and alternative actions are located at Scott Air Force Base (AFB) in St. Clair County, Illinois, which is approximately 20 miles east of St. Louis, Missouri. The base comprises approximately 2,848 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64 (Figure 1-1), near the cities of O'Fallon and Belleville.

1.2 PURPOSE AND NEED FOR ACTION

Currently, the United States (US) Army Surface Deployment and Distribution Command (SDDC) is geographically isolated with locations in Virginia at Fort Eustis, Newport News, and Alexandria. This results in a separation of organizations which should be collocated, and unnecessarily fragments Transportation Command's (TRANSCOM) command structure. Isolating complimentary TRANSCOM components forces redundancy of communications equipment, facility infrastructure, and personnel. According to 2005 Base Realignment and Closure (BRAC) requirements, Scott AFB must provide a joint operations center to house a consolidated TRANSCOM Operations Center to include the SDDC operations formerly located in Virginia, the planning and analysis components of the United States Air Force Tanker Airlift Control Center (TACC), and the US TRANSCOM Deployment and Distribution Operations Center (DDOC). This facility will hereafter be referred to as the SDDC TRANSCOM facility. An estimated 1,100 personnel are expected to relocate to Scott AFB as a result of this beddown. According to the Department of Defense (DoD) Form 1391 for TRANSCOM Consolidation, Phase I, this consolidation will yield a \$1.2 billion savings over a 20 year period (USAF undated). Currently there is no administrative space available at Scott AFB to house these offices. 164 MAF LSC personnel will be arriving as early as the fourth quarter of Fiscal Year (FY) 2007 and temporary facilities are needed to accommodate these personnel until construction of a permanent facility is complete.

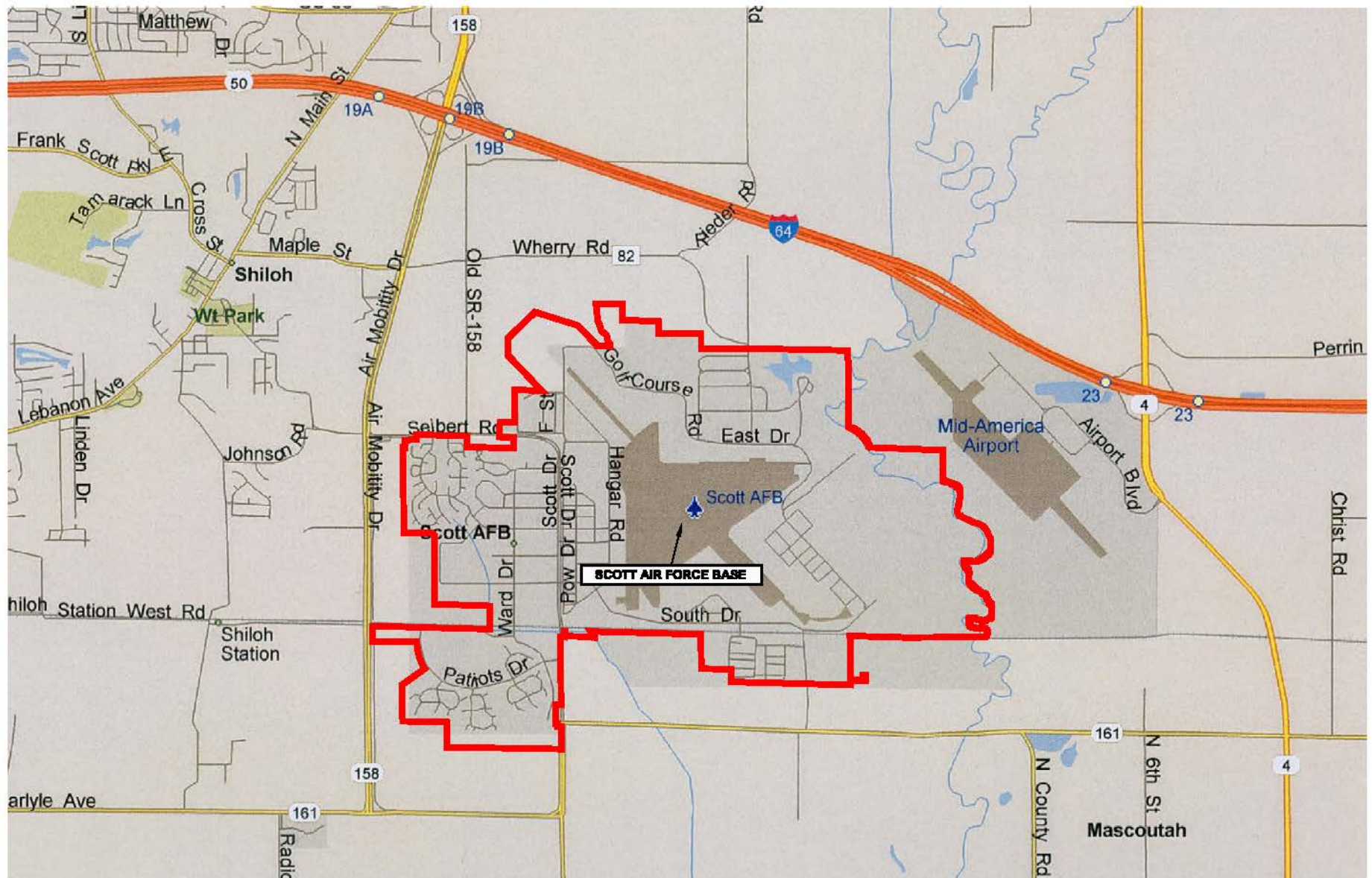
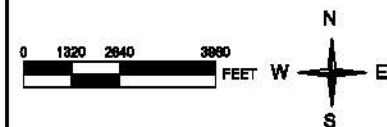


Figure 1-1
Vicinity Map

**Temporary SDDC
TRANSCOM Facility and
Temporary and Permanent
MAF LSC Facilities**



OVERVIEW MAP



Another 2005 BRAC requirement establishes the Mobility Air Force Logistics Support Center (MAF LSC) at Scott AFB by realigning Regional Supply Squadron (RSS) positions from Hurlburt Field, Florida and Sembach Air Base, Germany as well as Logistics Readiness Squadron (LRS) positions from Little Rock AFB, Arkansas and Altus AFB, Oklahoma. An estimated 164 personnel are expected to relocate to Scott AFB as a result of this beddown. Currently there is no administrative space available at Scott AFB to house the MAF LSC offices. LRS personnel will be arriving as early as the second quarter of FY2006 and temporary facilities are required to accommodate these personnel until construction of a permanent facility is complete.

The purpose of the proposed and alternative actions is to construct temporary administrative facilities adequate to support personnel coming to Scott AFB as a result of BRAC requirements. Scott AFB currently has a shortage of administrative space; therefore, construction of these facilities is needed to create administrative space for relocated personnel. Construction of temporary facilities is needed to allow for minimal disruption of inbound SDDC and LSC operations.

1.3 OBJECTIVE

The objective of this EA is to evaluate the potential impacts associated with the implementation of the Proposed Action, Alternative A, Alternative B, and the No-Action Alternative and to determine the significance of those impacts. If the potential impacts are not considered significant, a Finding of No Significant Impact (FONSI) will be prepared.

1.4 SCOPE OF THE EA

The National Environmental Policy Act (NEPA) of 1969, as amended, requires federal agencies to consider environmental consequences in their decision-making process. The President's Council on Environmental Quality (CEQ) has issued regulations to implement NEPA that include provisions for both the content and procedural aspects of the required environmental impact analysis. The Air Force Environmental Impact Analysis Process (EIAP) is accomplished through adherence to the procedures set forth in CEQ regulations (40 Code of Federal Regulations [CFR] Sections 1500-1508) and 32 CFR 989 (EIAP), 15 July 1999, and amended 28 March 2001. These federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation designed to ensure that deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action.

This EA identifies, describes, and evaluates the potential environmental impacts associated with implementation of the Proposed Action, Alternative A, Alternative B, and the No-Action Alternative, taking into consideration possible cumulative impacts from other actions. As appropriate, the affected environment and environmental consequences of the action may be described in terms of a regional overview or a site-specific description. FY2005 or the most current information is used as the baseline condition. If anticipated impacts would be significant, the Air Force would either prepare an Environmental Impact Statement (EIS) or would not implement the proposal. If impacts would not be significant, a FONSI would be prepared.

Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued by the President on 11 February 1994. In the EO, the President instructed each federal agency to make “achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” The Federal Interagency Working Group on Environmental Justice defines *adverse* as “having deleterious effects on human health or the environment that is significant, unacceptable, or above generally accepted norms.”

The Air Force has announced other independent actions for Scott AFB concurrent with the Proposed Action (see Section 2.5). The environmental impacts of these other actions, in most cases, have or will be analyzed in separate NEPA documents. Any potential cumulative impacts resulting from actions mentioned in Section 2.5 will be addressed in this EA. Actions associated with BRAC, including troop movement associated with the construction of the Phase I SDDC TRANSCOM Consolidation will be assessed in the Scott AFB General Plan EA, which is currently under development. A cumulative impact, as defined by the CEQ (40 CFR 1508.7), is the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

1.4.1 Resource Areas Addressed in Detail

Resource areas that could be affected by the proposed or alternative actions have been selected to allow for a comprehensive analysis of potential impacts. The following resource areas are discussed in detail in the EA:

- Air Quality
- Noise
- Wastes, Hazardous Materials and Stored Fuels
- Water Resources
- Biological Resources
- Socioeconomic Resources
- Land Use
- Utilities and Transportation Systems
- Safety and Occupational Health
- Environmental Management – Pollution Prevention
- Geology and Soils
- Environmental Justice

1.4.2 Resource Topics Eliminated from Detailed Analysis

Some resource areas or some aspects of resource areas would not be affected by the proposed or alternative actions. Resource areas that have been eliminated from further detailed study in this document and the rationale for eliminating them are presented below:

- Airspace and Aircraft Operations. There would be no change in the number of aircraft assigned to the installation and no change in the airspace associated with aircraft operations. Therefore, airspace and aircraft operations would not be affected by the proposed or alternative actions. Likewise the Scott AFB Air Installation Compatible Use Zone (AICUZ) program would not be affected by the proposed or alternative actions.
- Cultural Resources. The project areas are not located within the Historic District and according to the 1992 Archeological Assessment of Scott AFB, much of Scott AFB has been extensively modified (De Vore 1992). This Archeological Assessment for Scott AFB concludes that there is an extremely low potential for finding undisturbed and intact prehistoric as well as other historic archeological sites within the project area (De Vore 1992). Therefore, cultural resources would not be affected by the proposed or alternative actions.

1.5 DECISION(S) THAT MUST BE MADE

The decision to be made will include selecting one of the alternatives described as follows:

Proposed Action:

The Proposed Action consists of the construction of a temporary facility and associated infrastructure in support of the Phase I SDDC TRANSCOM Consolidation and a temporary facility and associated infrastructure in support of the Phase I MAF LSC. The Proposed Action also consists of construction of a permanent facility for Phase II MAF LSC and the addition of 164 personnel to the installation. The Proposed Action is discussed in detail in Section 2.4.1.

Alternative A:

Alternative A is the same as the Proposed Action, except that construction of the Phase I SDDC TRANSCOM facility and the temporary MAF LSC facility would occur at alternate locations on Scott AFB. Under this alternative, construction of the Phase I SDDC TRANSCOM facility would require relocation of a running track. Alternative A is discussed in detail in Section 2.4.2.

Alternative B:

Alternative B is the same as the Proposed Action, except that construction of the temporary MAF LSC facility would occur at an alternate location on Scott AFB. Alternative B is discussed in detail in Section 2.4.3.

No-Action Alternative:

Under the No-Action Alternative, the facilities and their associated infrastructure would not be constructed. The No-Action Alternative is discussed in detail in Section 2.4.4.

1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

Following is a list of Air Force Instructions (AFI), EOs, Acts, Air Force Manuals (AFMAN), Engineer Manual (EM), CFR, Department of Defense Instructions (DoDI), and Technical Orders (TO) that are most applicable to the proposed and alternative actions.

- *National Environmental Policy Act*, Public Law 91-190, 42 United States Code (USC) 4321-4347, January 1, 1970;
- CEQ regulations, 40 CFR parts 1500 through 1505;
- EO 11988 and 11990, Floodplain Management and Protection of Wetlands;
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations;
- *Clean Air Act* (1970, Amended 1990);
- Corps of Engineers Manual, EM 385-1-1, General Safety Requirements;
- 32 CFR, Part 989, EIAP;
- AFI 32-7062, Air Force Comprehensive Planning;
- AFI 32-7064, Natural Resources Management;
- AFI 32-7065, Cultural Resources Management;
- DoDI 4165.57 and AFI 32-7063, AICUZ Programs;
- 29 CFR, Occupational Safety and Health Standards;
- AFMAN 32-1123, Unified Facilities Guide;
- AFH 32-1084 Civil Engineer Facility Requirements;
- 40 CFR 93.153, Air Conformity Determination; and
- *Resource Conservation and Recovery Act* (RCRA) 1970.

Various permits would be required for activities such as construction or extensions of sanitary/storm sewers and water mains, and other related activities. Prior to construction, a Digging Permit and Air Force Form 103 (Base Civil Engineering Work Clearance Request) are required under AFI 32-1031 and Illinois Underground Utility Facilities Damage Prevention Act, and Public Act 86-0674, as amended. This section is not all-inclusive, as environmental regulations and standards are frequently modified.

During implementation of the construction alternatives, the 375th Civil Engineering Squadron/Civil Environmental Flight (CES/CEV) (Environmental Management Flight [EMF]) would be notified immediately if an action or activity were observed that could adversely affect human health and/or the environment. This organization would take immediate action to correct the condition or contact Illinois Environmental Protection Agency (IEPA) for further guidance, if necessary. Best management practices are encouraged throughout the construction process.

1.7 INTRODUCTIONS TO THE ORGANIZATION OF THE DOCUMENT

This EA is organized into seven chapters.

Chapter 1 Contains an introduction, a statement of the purpose and need for action, the objective of the EA, a summary of the scope of the environmental review,

identification of the decision to be made, identification of applicable regulatory requirements and required coordination, and a description of the organization of the document.

- Chapter 2 Contains an introduction, a description of selection criteria for alternatives, identifies alternatives eliminated from detailed study, provides a detailed description of the Proposed Action, describes the No-Action and other action alternatives, summarizes other actions announced for Scott AFB, identifies the preferred alternative, and provides a comparison matrix of environmental effects for all alternatives.
- Chapter 3 Contains a general description of the current conditions of the resources that could be affected by the proposed or alternative actions.
- Chapter 4 Provides an analysis of the environmental consequences of the proposed and alternative actions.
- Chapter 5 Lists preparers of this document.
- Chapter 6 Lists persons and agencies consulted in the preparations of this EA.
- Chapter 7 Lists source documents relevant to the preparation of this EA.

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Chapter 2

Description of the Alternatives Including the Proposed Action

CHAPTER 2

DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

2.1 INTRODUCTION

This section describes the selection criteria for alternatives, details of the Proposed Action, Alternative A, Alternative B, and No-Action, and past and reasonably foreseeable future actions relevant to cumulative impacts.

2.2 SELECTION CRITERIA FOR ALTERNATIVES

- 1) Proposed construction sites must avoid environmentally sensitive areas such as wetlands, floodplains, and habitats for threatened and endangered species.
- 2) The MAF LSC Facility must be capable of supporting the consolidated RSS and LSC personnel.
- 3) Facilities must meet requirements for equipment maintenance and storage.
- 4) Facilities must meet Scott AFB long-term development plans identified in the Base General Plan (BGP), as well as all other BGP provisions.
- 5) Facilities must meet space requirements and enhance safety.
- 6) New TRANSCOM facilities should be located near existing TRANSCOM facilities.

Alternatives considered for this EA include the Proposed Action, Alternative A, Alternative B, and No-Action. Additional alternative sites at Scott AFB that were considered and eliminated are described in Section 2.3 below.

The proposed and alternative actions were selected based upon their ability to meet the selection criteria listed above. The proposed and alternative actions are not located in wetlands, floodplains, or threatened and endangered species habitat. Temporary and permanent facility construction for the MAF LSC under the proposed and alternative actions meet the space requirements of housing both RSS and LSC personnel. The actions are compatible with the October 2004 BGP for the Major Command Administration Area Development Plan and the Community and Housing Area Development Plan. The BGP provides an illustration of Scott AFB's present and future capability to support its mission. The BGP is a stand-alone document prepared to respond to the Air Force's commitments to planning for future development and protecting the environment, as prescribed in the AFI 32-7062, *Air Force Comprehensive Planning*.

The alternatives described in this EA present the variety of construction location options for each facility. There is some flexibility in the alternatives and the final preferred option may include any combination of facility locations from the Proposed Action, Alternative A, and/or Alternative B. These alternatives were developed in order to determine the impacts for a range of possible facility locations; therefore impacts associated with any combination of facility locations would be accounted for in this analysis.

2.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

- Construction of MAF LSC facilities in Cardinal Creek was eliminated from further consideration because this remote location (on the northeast side of the runway, over 2 miles from proposed MAF LSC site) would have further separated the inbound LSC personnel from the RSS personnel already located at Scott AFB. In addition, costs associated with installation of utilities were prohibitive due to the remote location.
- Renovation of currently vacant Building 45 to house MAF LSC operations was eliminated from further consideration because the existing facility is historic and space requirements for the MAF LSC made Building 45 inadequate to house consolidated MAF LSC personnel.
- Construction of the SDDC TRANSCOM facility in the former trailer park at the south end of the runway was eliminated from further consideration due to its distance from TRANSCOM headquarters.

2.4 DESCRIPTION OF PROPOSED ALTERNATIVES

2.4.1 Proposed Action

Phase I SDDC TRANSCOM Consolidation

The Proposed Action consists of the construction of a temporary 165,000-square-foot, two-story facility in support of the Phase I SDDC TRANSCOM Consolidation. New construction would include all utilities, fire protection/suppression, pre-wired workstations in administrative areas, adequate parking (approximately 210,000 square feet), lighting, sidewalks, and antiterrorism force protection measures. Construction of a secure compartment information facility storage vault for secure information is also necessary. Construction of the temporary Phase I SDDC TRANSCOM facility and associated infrastructure is expected to last nine months and would be complete by June 2007. The location of the Phase I SDDC TRANSCOM facility is shown in Figure 2-1.

Phase I and II MAF LSC

The Proposed Action also includes the construction of a temporary 20,000-square-foot, one-story facility in support of the Phase I MAF LSC. New construction would include all utilities, fire protection/suppression, pre-wired workstations in administrative areas, lighting, sidewalks, and antiterrorism force protection measures. Existing parking would be utilized. Construction of the temporary Phase I MAF LSC facility and associated infrastructure is expected to last six months and would be complete by October 2006. The Proposed Action includes construction of a permanent 33,000-square-foot facility for Phase II of the MAF LSC. Construction of this permanent facility is expected to last 18 months and would be complete by July 2009. The locations of the temporary and permanent MAF LSC facilities are shown in Figure 2-1. In association with the MAF LSC, the Proposed Action also includes 164 personnel inbound to Scott AFB.

2.4.2 Alternative A

Phase I SDDC TRANSCOM Consolidation

Alternative A is the same as the Proposed Action, except that the temporary SDDC TRANSCOM facility would be constructed in an alternate location and the running track located on the proposed construction site would be relocated (see Figure 2-2).

Phase I and II MAF LSC

Alternative A is the same as the Proposed Action, except that the temporary MAF LSC facility would be constructed in an alternate location (see Figure 2-2) and would utilize existing utilities.

2.4.3 Alternative B

Phase I SDDC TRANSCOM Consolidation

Alternative B is the same as the Proposed Action with respect to the Phase I SDDC TRANSCOM Consolidation.

Phase I and II MAF LSC

Alternative B is the same as the Proposed Action, except that construction of the temporary facility would occur in an alternate location (see Figure 2-3) and the area of the facility would be reduced to 10,000 square feet.

2.4.4 No-Action Alternative

Phase I SDDC TRANSCOM Consolidation

Under the No-Action Alternative, the temporary facility and associated infrastructure would not be constructed; therefore, adequate facility space for the SDDC TRANSCOM Consolidation would continue to be unavailable. Failure to consolidate the SDDC Operations Center with the TACC and the TRANSCOM DDOC would negate the positive effects of the BRAC recommendation and would propagate wasteful redundancy of personnel and communications infrastructure (USAF undated). Adequate space would have to be found via off-base leases, impacting the mission accomplishment of TRANSCOM, and requiring significant work stoppages and alterations as relocated personnel adjust to new and difficult work separations. Additionally, force protection and security would not be maintained in such a situation for Headquarters personnel. Air Mobility Command (AMC), and therefore TRANSCOM's mission, would be severely and unnecessarily endangered if this temporary facility is not made available. Without construction of a temporary facility, SDDC personnel would be required to remain in Virginia in leased spaces, resulting in a reduction of BRAC savings (USAF undated). The running track would not be relocated.

Phase I and II MAF LSC

Under the No-Action Alternative, the temporary and permanent facilities and associated infrastructure would not be constructed; therefore, adequate facility space for the MAF LSC would continue to be unavailable. Vital work centers for equipment management and computer operations, as well as work centers for weapons systems management for C-5, C-17, C-130, C-141, and KC-135 aircraft would be outsourced to other Air Force logistics facilities.



Figure 2-1
Proposed Action
Site Location

Temporary SDDC
TRANSCOM Facility and
Temporary and Permanent
MAF LSC Facilities



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Feet

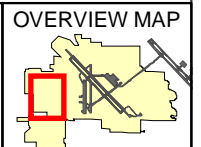




Figure 2-2
Alternative A
Site Location

Temporary SDDC
TRANSCOM Facility and
Temporary and Permanent
MAFLSC Facilities



0 125 250 500
Feet

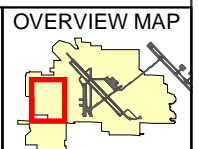


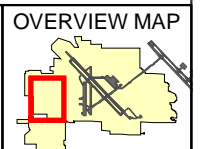


Figure 2-3
Alternative B
Site Location

Temporary SDDC
TRANSCOM Facility and
Temporary and Permanent
MAF LSC Facilities



0 125 250 500
Feet



2.5 DESCRIPTION OF PAST AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

This EA also considers the effects of cumulative impacts (40 CFR 1508.7) and concurrent actions (40 CFR 1508.25(1)), if any are applicable to the proposed or alternative actions. Other actions announced for Scott AFB that could occur during the same time period as the proposed or alternative actions include:

- Widening of Ward Street to three lanes.
- Construction of a three-story, 210,000 square foot Headquarters Joint Use Administrative facility to consolidate personnel from headquarters AMC and headquarters TRANSCOM. Buildings 1910 and 1911 will be demolished prior to construction of this facility.
- Construction of an addition to the Network Communications Center (Building 1575) and construction of a new Distribution and Deployment Planning Center on the site of Building 1521.
- Construction of an Enlisted Dormitory adjacent to existing dormitories. This facility will replace the currently substandard Building 1912.
- Construction of a Child Development Center in the Patriots Landing housing area to replace the existing Child Development Center adjacent to the hospital.
- Construction of a 21,000 square foot C-40 Squadron Operations facility in the area south of the fire station on the west side of the flightline.
- Relocation of the refueler truck parking area to the southern flightline.
- Renovation of the first floor of the Steam Plant.
- Demolish Building 1970 and construct a new Security Forces building on the southern flightline.
- Construction of a 14,000 square foot Medical War Reserve Material Warehouse in the southern portion of the Warehouse District.

The actions identified above are addressed from a cumulative perspective in this EA. The impacts of past actions are included in the baseline, and, thus, are not considered in this EA.

2.6 IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred alternative, referred to as the Proposed Action, includes construction of two temporary facilities and associated infrastructure, as well as construction of a permanent facility for Phase II of the MAF LSC. As mentioned in Section 2.2 the final preferred option may include any combination of facility locations from the Proposed Action, Alternative A, and/or Alternative B.

2.7 COMPARISON OF ENVIRONMENTAL EFFECTS OF ALL ALTERNATIVES

Table 2-1 summarizes the impacts of the Proposed Action, Alternative A, Alternative B, and the No-Action Alternative.

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Table 2-1 Summary of Environmental Impacts

| Resource | Proposed Action | Alternative A | Alternative B | No-Action Alternative |
|--|---|--|---|--|
| | Construct Phase I SDDC, and Phase I and II MAF LSC facilities. Construct infrastructure for all three facilities. Addition of 164 military personnel and their families. | Construct Phase I SDDC, and Phase I MAF LSC facility at alternate locations. Construct infrastructure for both facilities and for Phase II MAF LSC facility. Addition of 164 military personnel and their families. | Construct Phase I SDDC same as Proposed Action. Construct Phase I MAF LSC in alternate location. Construct infrastructure for both facilities and for Phase II MAF LSC facility. Addition of 164 military personnel and their families. | No construction of facilities or infrastructure. No addition of 164 military personnel and their families. |
| Air Quality | Short-term minor increases in equipment and vehicle emissions, fugitive dust, and particulate matter. Minor long-term increases in air emissions for NO _x , VOC, and CO expected from motor vehicles operated by the 164 inbound personnel are expected to be negligible when compared to overall regional motor vehicle emissions. No long-term impacts. | Same as Proposed Action except that there would be slightly higher air emissions. | Same as Proposed Action except that there would be slightly lower air emissions. | No change. |
| Noise | Short-term minor increase in noise levels from construction activities. No long-term increase in noise levels. | Same as Proposed Action except that (1) the child care facility would encounter a short-term minor increase in noise levels, and (2) more buildings would be exposed to construction noise. | Same as Proposed Action except that more buildings would be exposed to elevated construction noise levels. | No change. |
| Wastes, Hazardous Materials and Stored Fuels | Workers have the potential to encounter contaminated soil; however, no impacts are expected as long as workers follow the required Health and Safety Plan and Emergency Response Plan. Potentially contaminated soils would be stockpiled on-site and disposed of in accordance with appropriate regulations. A potential long-term positive impact may result from construction of an engineered barrier (e.g. asphalt or concrete parking area) which would be left in place after removal of the temporary SDDC TRANSCOM facility. | Similar to the Proposed Action in that workers would have the potential to encounter contaminated soils; however, exposure would be the result of soil excavation related to running track relocation. Potentially contaminated soils would be managed in the same manner as the Proposed Action. Positive impacts would be similar to the Proposed Action, except that the physical barrier would be provided by the running track. Also, vegetation planted around the running track would help suppress dust from contaminated soils. | Same as Proposed Action. | Potential for human exposure to contaminated soils at the softball fields. |
| Water Resources | Short-term impacts to surface water quality, minimized through implementation of a Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs). No impacts are expected to groundwater due to depth to groundwater. No impacts to floodplains or wetlands as none are adjacent to project sites. | Same as Proposed Action. | Same as Proposed Action. | No change. |
| Biological Resources | No impacts to biological resources, as there are no significant or unique biological resources located at the project sites. | Same as Proposed Action. | Same as Proposed Action. | No change. |
| Socioeconomic Resources | Long-term increase in population size. Long-term decrease in available off-base housing as a result of inbound personnel being housed off-base. Long-term impact to local schools due to enrollment of 164 additional children. Positive short-term and long-term impacts to local economy through construction expenditures and additional families moving to local area. | Same as Proposed Action. | Same as Proposed Action. | Predicted savings of \$1.2 billion over 20 years resultant from BRAC recommendations would not be realized, resulting in a long-term adverse impact on economy. Temporary facility and associated infrastructure would not be constructed and adequate facility space for the SDDC TRANSCOM Consolidation would continue to be unavailable. Failure to consolidate the SDDC Operations Center with the TACC and the TRANSCOM DDOC would negate the positive effects of the BRAC recommendation and would propagate wasteful redundancy of personnel and communications infrastructure. Adequate space would have to be found via off-base leases, impacting the mission accomplishment of TRANSCOM, and requiring significant work stoppages and alterations as personnel adjust to new and difficult work separations. Force protection and security would not be maintained in such a situation for Headquarters personnel (USAF undated). Long-term adverse impacts to the AMC, and therefore the TRANSCOM mission. |

Table 2-1 Summary of Environmental Impacts (Cont.)

| Resource | Proposed Action Construct Phase I SDDC, and Phase I and II MAF LSC facilities. Construct infrastructure for all three facilities. Addition of 164 military personnel and their families. | Alternative A Construct Phase I SDDC, and Phase I MAF LSC facility at alternate locations. Construct infrastructure for both facilities and for Phase II MAF LSC facility. Addition of 164 military personnel and their families. | Alternative B Construct Phase I SDDC same as Proposed Action. Construct Phase I MAF LSC in alternate location. Construct infrastructure for both facilities and for Phase II MAF LSC facility. Addition of 164 military personnel and their families. | No-Action Alternative No construction of facilities or infrastructure. No addition of 164 military personnel and their families. |
|---|---|---|--|---|
| Land Use | New administrative areas would be compatible with adjacent land uses; therefore, there would be no impacts to land use. | Same as Proposed Action except that no change in land use would result from relocation of running track. | Same as Proposed Action . | No change. |
| Utilities and Transportation Systems | Short-term minor increase in solid waste generation. 345,500 square foot increase in impervious cover. Construction activities would require implementation of a SWPPP and site erosion control plan, which would minimize short-term increase in soil erosion and sediment loadings in storm water runoff. Minor short-term and long-term increase in traffic counts and potential for transportation of heavy equipment/materials to adversely affect road surface conditions. Long-term increase in electrical and natural gas consumption for installation. | Same as Proposed Action with the following exceptions. There would be an increase in solid waste generated as a result of the running track relocation and there would be a reduction in the amount of impervious surface constructed. Also, a SWPPP and erosion control plan would be required for construction of the relocated running track. | Same as Proposed Action with the following exceptions. There would be less solid waste generated from construction since the temporary MAF LSC facility would be half the area as the one constructed under the Proposed Action. Also, there would be a reduction in the amount of impervious surface constructed. | No change. |
| Safety and Occupational Health | Workers have the potential to encounter contaminated soil; however, no impacts are expected as long as workers follow the required Health and Safety Plan and Emergency Response Plan. | Similar to the Proposed Action in that workers would have the potential to encounter contaminated soils; however, exposure would be the result of soil excavation related to running track relocation. Short-term adverse impacts are anticipated for regular users of the running track, as they would be required to find alternate recreational walking/running/jogging areas. These areas could carry risks such as increased traffic, uneven walking surfaces, and reduced lighting. | Same as Proposed Action. | No change. |
| Environmental Management – Pollution Prevention | Short-term increase in recyclable asphalt resulting from construction. Long-term increase in administrative recyclable materials. | Same as Proposed Action except that more recyclable asphalt would be generated due to the relocation of the running track. | Same as Proposed Action except that less recyclable asphalt would be produced due to the reduced size of the temporary MAF LSC facility. | No change. |
| Geology and Soils | No impact to soils or geological resources is anticipated provided that Phase I and II National Pollutant Discharge Elimination System permits are acquired and that BMPs are implemented. | Same as Proposed Action. | Same as Proposed Action. | No change. |
| Environmental Justice | No environmental justice community is located at Scott AFB; therefore, there would be no impact to minority or low-income populations. | Same as Proposed Action. | Same as Proposed Action. | No change. |

Chapter 3

Affected Environment

CHAPTER 3 AFFECTED ENVIRONMENT

3.1 INTRODUCTION

This section describes the current conditions of the environmental resources, either manmade or natural, that would be affected by implementation of the proposed or alternative actions. Chapter 3.0 serves as a baseline for evaluating the environmental status of the proposed and alternative actions. Additionally, this EA addresses the following resource areas:

- Air Quality;
- Noise;
- Wastes, Hazardous Materials, and Stored Fuels;
- Water Resources;
- Biological Resources;
- Socioeconomic Resources;
- Land Use;
- Utilities and Transportation Systems;
- Safety and Occupational Health;
- Environmental Management;
- Geology and Soils;
- Environmental Justice; and
- Indirect and Cumulative Impacts.

The aforementioned resource areas are not listed in order of significance.

3.2 INSTALLATION LOCATION, HISTORY, AND CURRENT MISSION

Scott AFB is located in St. Clair County, Illinois, which is approximately 20 miles east of St. Louis, Missouri. The installation comprises approximately 2,848 acres and is located in predominately agricultural area. The installation is immediately south of Interstate Highway 64, near the cities of O'Fallon and Belleville.

Scott AFB is one of the oldest continuous service Air Force installations. Over the years, the installation has supported a variety of missions, beginning with the training of combat pilots during WWI (USAF 2003). The aviation field was named after Corporal Frank Scott, the first enlisted person to be killed in an aviation crash. On September 2, 1917 the arrival of the 11th and 21st Aero Squadrons initiated Scott AFB's combat training mission. In 1918, Scott AFB's air ambulance was established; this early aeromedical evacuation was the beginning of a primary role for Scott AFB. Following WWI, the government decided that the field should be turned over to the lighter-than-air (LTA) branch of the Air Corps where balloon observers and airship pilots trained. This continued until 1937 when the LTA crafts were discontinued at the field and the War Department changed Scott AFB to a heavier-than-air field. In 1938 the field was designated as the new home of the General Headquarters of the Air Forces of the entire United States Army making the field the nerve center of the entire Army Air Corps. In 1939, Scott AFB

was designated as the Scott Field branch of the Army Air Corps. Today, Scott AFB is home to three headquarters: TRANSCOM, AMC, and the Defense Information Technology Contracting Organization. The 375th Airlift Wing is also host to more than 30 tenant units, including the Air Force Communications Agency; the Air Force Office of Special Investigations 3rd Field Investigations Region; and Air Force Reserve wing; and an Air National Guard unit (USAF 2004a).

The primary mission of Scott AFB is global mobility. The installation commands and controls all logistics of United States military in air, over land and across the sea. The installation is responsible for providing United States aeromedical evacuation capabilities, flying operational support airlift in the C-21, and air refueling missions in the KC-135. Scott AFB supplies forces to theater combatant commanders (USAF 2006a).

3.3 DESCRIPTION OF THE AFFECTED ENVIRONMENT

3.3.1 Air Quality

3.3.1.1 Air Quality Standards and Regulations

The United States Environmental Protection Agency (USEPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) under the Clean Air Act Amendments of 1990 (CAAA). The CAAA also set emission limits for certain air pollutants from specific sources, set new source performance standards based on best demonstrated technologies, and established national emission standards for hazardous air pollutants.

The CAAA specifies two sets of standards—primary and secondary—for each regulated air pollutant. Primary standards define levels of air quality necessary to protect public health, including the health of sensitive populations such as people with asthma, children, and the elderly. Secondary standards define levels of air quality necessary to protect against decreased visibility and damage to animals, crops, vegetation, and buildings. Federal air quality standards are currently established for six pollutants (known as criteria pollutants), including carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O₃), sulfur oxides (SO_x, commonly measured as sulfur dioxide [SO₂]), lead, and particulate matter (equal to or less than 10 micrometers in aerodynamic diameter [PM₁₀] and equal to or less than 2.5 micrometers in aerodynamic diameter [PM_{2.5}]). Although O₃ is considered a criteria pollutant and is measurable in the atmosphere, it is often not considered as a pollutant when reporting emissions from specific sources. O₃ is rarely emitted directly from emissions sources, rather it is formed via atmospheric reactions between sunlight and its precursors—NO_x and volatile organic compounds (VOCs)—that are directly emitted from various sources. Thus, emissions of NO_x and VOCs are monitored to control the formation of ground level O₃.

USEPA classifies the air quality within an Air Quality Control Region (AQCR) according to whether the region meets federal primary and secondary air quality standards. An AQCR or portion of an AQCR may be classified as attainment, nonattainment, or unclassified with regard to the air quality standards for each of the criteria pollutants. “Attainment” describes a condition in which standards for one or more of the six pollutants are being met in an area. The area is considered an attainment area for only those criteria pollutants for which the NAAQS are being

met. "Nonattainment" describes a condition in which standards for one or more of the six pollutants are not being met in an area. "Unclassified" indicates that air quality in the area cannot be classified and the area is treated as attainment. An area may have all three classifications for different criteria pollutants.

Scott AFB is located within the Metropolitan St. Louis Interstate Air Quality Control Region (AQCR #070). The state air quality-monitoring site closest to Scott AFB is the East St. Louis monitoring station, located in St. Clair County approximately 18 miles west of Scott AFB. Table 3-1 compares the applicable NAAQS with the East St. Louis monitoring site maximum pollutant concentrations for the 3-year period 2002-2004 (USEPA 2005).

Table 3-1 Comparison of Air Quality Measurements in St. Clair County (East St. Louis Station) with Federal Standards

| Pollutant | Averaging Period | National Ambient Air Quality Standards (ppm) ^a | Maximum Concentrations (ppm) ^a | | |
|--|------------------|---|---|------------------------|------------------------|
| | | Primary | 2002 | 2003 | 2004 |
| Carbon monoxide | 1-hour | 35 | 3.5 | 4.4 | 3.4 |
| | 8-hour | 9 | 2.8 | 3.2 | 2.2 |
| Nitrogen oxide | Annual | 0.053 | 0.017 | 0.016 | 0.016 |
| Particular Matter (PM ₁₀) | 24-hour | 150 µg/m ³ | 107 µg/m ³ | 70 µg/m ³ | 54 µg/m ³ |
| | Annual | 50 µg/m ³ | 30 µg/m ³ | 34 µg/m ³ | 29 µg/m ³ |
| Particulate Matter (PM _{2.5}) ^b | 24-hour | 65 µg/m ³ | 89 µg/m ³ | 51 µg/m ³ | 35 µg/m ³ |
| | Annual | 15.0 µg/m ³ | 16.7 µg/m ³ | 14.9 µg/m ³ | 14.7 µg/m ³ |
| Lead | Quarterly Mean | 1.5 µg/m ³ | 0.04 µg/m ³ | 0.06 µg/m ³ | 0.05 µg/m ³ |
| Sulfur dioxide | 3-hour | 0.5 | 0.190 | 0.168 | 0.124 |
| | 24-hour | 0.14 | 0.056 | 0.049 | 0.039 |
| | Annual | 0.030 | 0.006 | 0.005 | 0.004 |
| Ozone ^c | 1-hour | 0.120 | 0.117 | 0.134 | 0.102 |
| | 8-hour | 0.080 | 0.103 | 0.111 | 0.078 |

Notes:

PM_{2.5}= particulate matter equal to or less than 2.5 micrometers in aerodynamic diameter

PM₁₀= particulate matter equal to or less than 10 micrometers in aerodynamic diameter

ppm=parts per million

µg/m³=micrograms per cubic meter

^a Unless otherwise stated

^b There was one exceedance in 2002 with no exceedances in 2003 and 2004

^c For the 1-hour standard, there were no exceedances in 2002 and 2004 and two exceedances in 2003 from this monitor. For the 8-hour standard, there were nine exceedances in 2002, three exceedances in 2003, and no exceedances in 2004 from this monitor.

This AQCR is designated as a moderate non-attainment area for ozone and PM_{2.5}, a limited maintenance area for carbon monoxide, and either as attainment or no designation for the remaining pollutants.

3.3.1.2 Emissions Inventory

This section presents information on air pollutant emissions from activities at Scott AFB. The Scott AFB emissions are also compared with ozone-producing pollutant emissions from the Illinois portion of the St. Louis Standard Metropolitan Statistical Area (MSA) of AQCR #070.

Table 3-2 summarizes annual emissions at Scott AFB for calendar year 2004. This table was developed from an emission inventory compiled by Scott AFB (USAF 2005a). Emissions, reported in tons per year (tpy), are organized into 20 categories: abrasive blasting, aerospace ground equipment, aircraft operations, asphalt paving operations, degreasing, external combustion, fire training, fuel cell maintenance, fuels dispensing/loading, fuel transfer, internal combustion, jet engine testing, landfills, munitions and fire arms, paint gun cleaning, storage tanks, surface coating, vehicle emissions, woodworking, and wet cooling towers. Table 3-2 also presents air emissions for 2001 in St Claire County, IL for each criteria pollutant.

Table 3-2 Air Pollutant Emissions for Scott AFB and St Clair County, IL

| | Annual Emissions (tpy) | | | | | |
|---|------------------------|--------|-----------------|-----------------|------------------|-------------------|
| | CO | VOC | NO _x | SO ₂ | PM ₁₀ | PM _{2.5} |
| St.Claire County, IL 2001 Emission Inventory ^a | 86,161 | 13,691 | 11,814 | 4,472 | 12,608 | 3,666 |
| 2004 Scott AFB Emissions Inventory ^{b,c} | 540 | 291 | 96 | 18 | 36 | 36 |
| Percent of Regional Emissions ^d | 0.63% | 2.13% | 0.81% | 0.40% | 0.29% | 0.98% |

Notes:

AFB = Air Force Base
CO = carbon monoxide
IL=Illinois

tpy = tons per year
SO₂ = sulfur dioxide

VOC = volatile organic compound
NO_x = nitrogen oxides

PM_{2.5}= particulate matter equal to or less than 2.5 micrometers in aerodynamic diameter
PM₁₀= particulate matter equal to or less than 10 micrometers in aerodynamic diameter

^a Includes emissions from point, area, on-road, non-road mobile sources, and biogenic sources. Source: AIRData; Emissions come from an extract of USEPA's National Emission Inventory. 2001 data are most recent available.

^b Scott AFB emissions were obtained from 2004 Air Emission Inventory for Scott AFB (USAF 2005a).

^c PM_{2.5} emissions assumed to be the same as PM₁₀ emissions.

^d Compares 2004 Scott AFB emissions to 2001 St. Claire County, IL emissions.

3.3.2 Noise

DoDI 4165 establishes and requires military departments to develop, implement, and maintain an AICUZ program for installations with flying operations. AFI 32-7063, AICUZ Program, sets forth the policy, responsibilities, and requirements of the program. Topics covered include program objectives, responsibilities, land use compatibility guidelines, and AICUZ studies and updating. This program is designed to provide information on flight operations and compatibility guidelines to local planners to help them mitigate the noise impacts of military aircraft operations. The AICUZ program uses information on aircraft types, flight patterns, power settings, numbers of operations, and time of day or night to estimate average busy-day noise levels. This estimation is accomplished by using the NOISEMAP computer model and the results are expressed in terms of the day-night average sound level. The latest AICUZ report for Scott AFB was completed in February 2001. Noise level contours based on the computer noise model NOISEMAP indicate the noise levels at the potential locations of the proposed and alternative actions to be less than 70 decibels (dB). Air Force AICUZ guidelines recommend restrictions for land use at varying noise levels. At noise levels between 65 and 69 dB the only restriction is for residential land use unless sound attenuation materials are installed (USAF 2004b). Noise

standards are also addressed in Occupational Safety and Health Administration (OSHA) standards and implemented by regulation 29 CFR 1910.95. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB. Ambient noise sources in the vicinity of the proposed project sites include aircraft from the flightline and normal vehicular traffic on the streets surrounding the sites.

When describing sound levels in relation to humans, a weighted sound level is used to characterize the sound levels to which the human ear responds especially well by emphasizing mid-frequencies and de-emphasizing the low and high frequencies. Sound levels weighted in this manner are referred to as A-weighted decibels or dB(A).

Noise associated with the operation of machinery on construction sites is typically short-term, intermittent, and highly localized. The loudest machinery generally produces peak sound pressure levels (SPL) ranging from 86 to 95 dB(A) at 50 ft from the source (Regan and Grant 1997). For every multiple of this distance, SPL decreases by approximately 6 dB(A). It is important to note that the peak SPL range for construction equipment noise does not take into account the ability of sound to be reflected/absorbed by nearby objects, which would further reduce noise levels.

A noise-sensitive receptor is commonly defined as occupants of any facility where a state of quietness is a basis for use, such as a residence, hospital, or church. Noise-sensitive receptors near the project sites include residences approximately 65 feet west of a facility site, a running track approximately 250 feet northwest of a facility site, and a child care facility approximately 65 feet west of a facility site.

3.3.3 Wastes, Hazardous Materials and Stored Fuels

The *Resource Conservation and Recovery Act* established statutory requirements that serve as the basis of the hazardous waste regulations. These regulations are found at 40 CFR 260-279. Corresponding state regulations identifying and listing hazardous wastes and standards applicable to generators of hazardous wastes are found at 35 Illinois Administrative Code 721-722. Hazardous chemicals and materials are defined in 29 CFR 1900.1200. Legal requirements regarding emergency planning and reporting of hazardous and toxic chemicals are noted in the *Emergency Planning and Community Right to Know Act*.




Information obtained from the *Management Action Plan* (USAF 2001) and *Preliminary Assessment/Site Inspection Report (PA/SI) Area of Concern (AOC) 18 (Coal Storage Pile Basewide)* (USAF 2005b) indicates that from the early 1930s until the late 1960s, coal was used as the main fuel source for the installation. When coal was discontinued as the main source of fuel in 1969, the coal stockpiles were removed from Scott AFB and reclaimed, leaving coal slag and debris behind. The nearly four decades of coal storage had impacted the soils beneath the stockpiles, saturating them with hydrocarbons. These hydrocarbon contaminated soils were described as AOC 18 in the *Management Action Plan* and *PA/SI Report* and are shown on Figure 3-1. Sometime after the stockpiles were removed, the site was developed with two softball fields (Ball Fields 3 and 4, also known as Features 6388 and 6389). Use of the ball fields for recreational purposes was discontinued approximately three years ago and the northern ball field has recently been put to use as a storage area for vehicles and other items. The ball fields are the

site of the temporary SDDC TRANSCOM facility under the Proposed Action and Alternative B or the relocated running track under Alternative A.

Site investigation activities at AOC 18 conducted in February 2005 (USAF 2005b) included the collection of sediment, surface soil, and subsurface soil samples. The analytical results from laboratory analysis of these samples were then compared to the Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Illinois Soil Remedial Objectives (ISROs) for Industrial/Commercial properties, the applicable regulatory screening criteria to assess the presence and extent of contamination at the site. Organic and inorganic constituents were not detected in the sediment, surface soils, and/or subsurface soils at AOC 18 above TACO Tier 1 ISROs for commercial/industrial workers. However, hydrocarbon constituents were detected above TACO Tier 1 ISROs for construction workers. Both organic and inorganic chemical concentrations detected in groundwater samples at AOC 18 were compared to the TACO Tier 1 Illinois Groundwater Remedial Objectives (IGRO) for Class I Groundwater used as a drinking water source. Sulfate, cadmium, iron, manganese, and nickel were detected in the groundwater at concentrations exceeding the TACO Tier 1 Class I IGRO.

Asbestos-containing materials (ACM) and lead-based paint (LBP) were prohibited from use as construction materials in the 1970's. There are currently no buildings or structures known to contain lead or ACM at the proposed project sites.

LEGEND

-  Project Area
-  Area of Concern (AOC) 18
-  Base Boundary

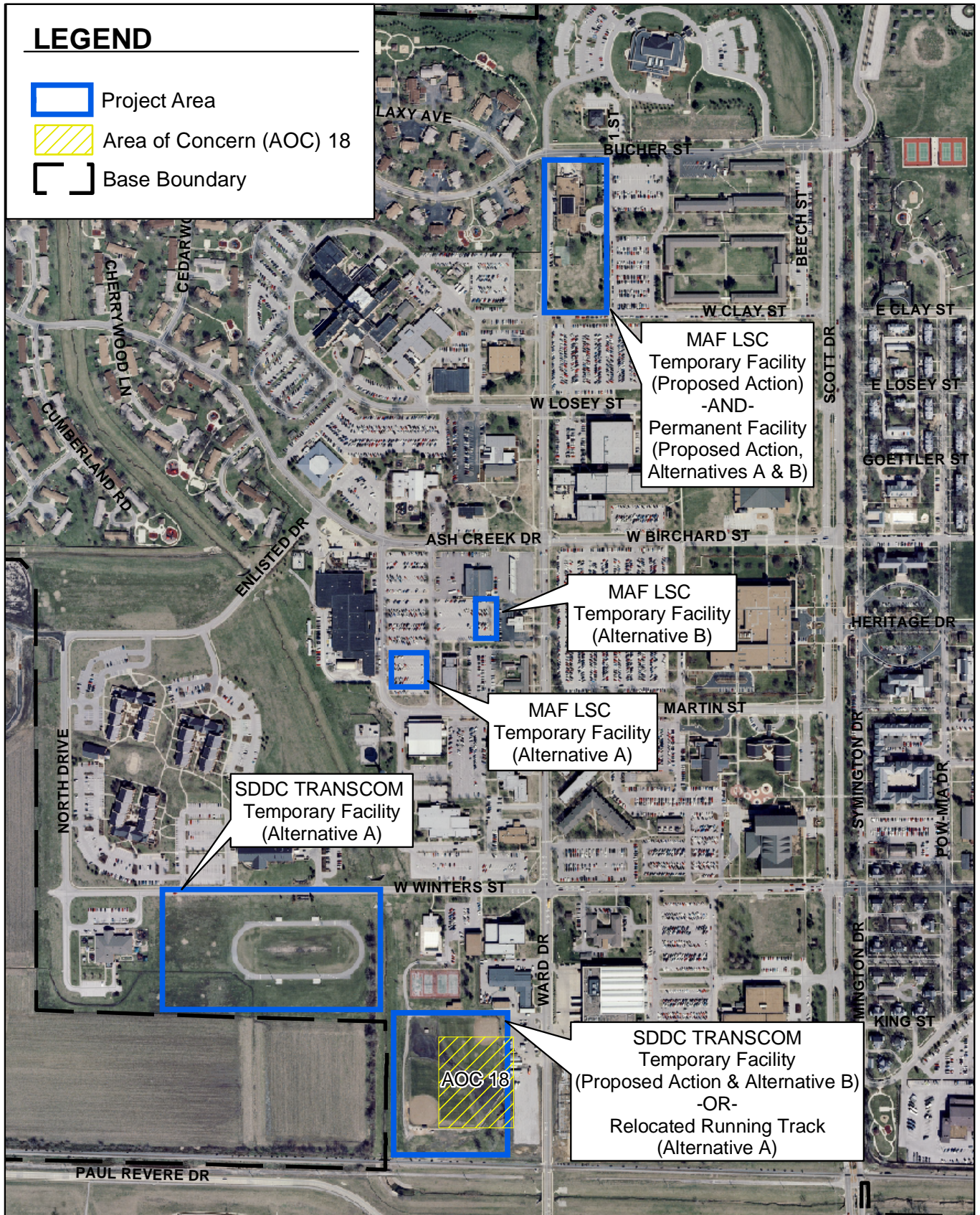
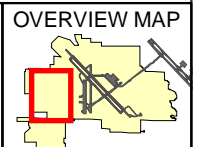


Figure 3-1
Area of Concern 18

Temporary SDDC
TRANSCOM Facility and
Temporary and Permanent
MAF LSC Facilities



0 125 250 500
Feet



3.3.4 Water Resources

3.3.4.1 Surface Water Resources

Scott AFB is located within the Kaskaskia Watershed, which drains to the Kaskaskia River and then discharges to the Mississippi River near the Illinois/Missouri border. The total Kaskaskia Watershed drainage area is 5,801 square miles (NRCS 2006). The water bodies located within Scott AFB include Ash Creek, Silver Creek, Scott Lake, Cardinal Lake, and golf course ponds. Ash Creek originates approximately 1 mile northwest of Scott AFB and flows through the Galaxy and Shiloh Housing areas and discharges into Loop Creek, a tributary of Silver Creek. Silver Creek originates 51 miles north of Scott AFB, in an agricultural area, and flows along the eastern side of Scott AFB (USGS 1982). The overland flow for Scott AFB discharges into Ash and Silver Creeks, with Ash Creek receiving 40 percent and Silver Creek receiving 60 percent. The lakes are associated with overland flow; both Scott and Cardinal Lakes receive drainage during rain events, while the golf course ponds receive treated wastewater (USAF 2004b). The site of the SDDC TRANSCOM temporary facility under the Proposed Action and Alternative B and the relocated running track under Alternative A, would be located adjacent to Ash Creek and would contain one storm drain located to the west side of the site. The site of the MAF LSC temporary and permanent facilities under the Proposed Action would be located 1800 feet to the east of Ash Creek and contain two storm drains, west and south of the site.

The site of the SDDC TRANSCOM temporary facility under Alternative A would be located approximately 400 feet west of Ash Creek and would contain one storm drain located to the north-east of the site. The site of the temporary MAF LSC facility under Alternative A would be located 500 feet to the east of Ash Creek, and have storm drains located to the west of the site. The permanent MAF LSC facility under Alternative A would be located at the same site as under the Proposed Action.

The location for the permanent MAF LSC facilities under Alternative B would be the same as the locations under the Proposed Action and Alternative A. The site of the temporary MAF LSC facility under Alternative B would be located 900 feet east of Ash Creek and would have storm drains located to the east of the site.

3.3.4.2 Floodplains

EO 11988, *Floodplain Management*, requires that federal agencies provide leadership and take action to reduce the risk of flood loss; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values of floodplains when acquiring, managing, or disposing of federal lands. Two separate 100-year floodplains are present on Scott AFB, with the most recent designation of floodplains in 2003. Both floodplains are associated with Ash and Silver Creeks. One floodplain is located on the south area of Scott AFB, following Ash Creek; the second is located in the east area of Scott AFB, following Silver Creek (FEMA 2003). No proposed project sites are located within these floodplains.

3.3.4.3 Groundwater Resources

Groundwater resources at Scott AFB are limited due to the shallow and discontinuous nature of the alluvial and glacial formations covering the installation as well as the generally non-potable characteristics of the underlying bedrock aquifers. Saline water often characterizes these aquifers.

The significant hydrologic units in the Scott AFB area consist of unconsolidated sand and gravel deposits of Quaternary age and consolidated sandstone, limestone, and dolomite of Paleozoic age. Water quality is dependant upon depth of withdrawal, but is adequate or can be treated and made adequate for most uses.

A brief description of the principal water bearing units, in order of increasing depth, follows.

Alluvium: This water bearing unit consists of the Cahokia soil formation which is comprised of poorly sorted silt, clay, and silty sand with interment layers of sand and gravel. Groundwater is located within these layers, at a depth of approximately 1 to 3 feet below ground surface (bgs). The Cahokia Formation is generally 15 to 25 feet thick in the broader river valleys. Water can be withdrawn from this formation and is used by municipal water suppliers and for agricultural uses. The formation is primarily found on the eastern areas of the installation, within the shores of Silver Creek (ISGS 1998).

Glacial Aquifers: Regional glacial deposits consist of permeable sand and gravel layers approximately 100 feet thick. Water bearing units include sand and gravel layers with the Pearl Formation and the Vandalia Till Member of the Glasford Formation. The Pearl Formation was created by meltwater from Illinois Episode's glacial ice (ISGS 1998). Data from test wells in 1942 by the Illinois State Water Survey indicated groundwater at depths ranging from 10 to 35 feet bgs. East of Silver Creek, small industrial and municipal wells having yields of approximately 20 gallons per minute (gpm) may be possible within these aquifers. Groundwater discharges to bedrock below or to the local surface water as base flow (USAF 2004b).

Bedrock Aquifer: The water bearing unit consists of Pennsylvanian sandstones and limestones, repeating as sequences of beds deposited during multiple sedimentary cycles. The thickness of Pennsylvanian rocks that is saturated with freshwater ranges from less than 100 feet to more than 300 feet, with freshwater only being found in peripheral parts of the area underlain by the Pennsylvanian rocks. Recharge to these aquifers takes place through the overlying Quaternary deposits. Yields of wells within this aquifer have been reported to range from less than 1 to about 100 gpm. The average well yield is about 10 gpm (USGS 1982).

Underneath Scott AFB, the ground water levels range from twenty feet on the western side of the installation to less than one foot on the eastern side.. The water generally flows underground from west to east (USAF 2004b).

3.3.4.4 Water Use and Treatment

Drinking water for Scott AFB is provided by the Illinois-American Water Company and no potable water wells are located on the installation. As a result of poor groundwater supplies the

Illinois-American Water Company uses the Mississippi River as its source of drinking water and services areas throughout Illinois. The water is delivered on-base by two pipelines and is divided into several distribution zones: Main Base, Air National Guard, housing areas, and the areas surrounding the wastewater treatment plant (WWTP). The distribution system services approximately 15,000 personnel, including 2,000 facilities and housing units (USAF 2004b). An abandoned water main is present at the Proposed Action's temporary SDDC TRANSCOM facility site.

Scott AFB has a WWTP, Building 3300, and that facility treats the wastewater for the entire installation. The design capacity of the facility is 2.0 million gallons per day (mgd). The system is composed of gravity sewers, lift stations, and force mains. The effluent is discharged, under National Pollutant Discharge Elimination System (NPDES) permit number IL0026859, into the golf course pond, Cardinal Lake, and Mosquito Creek (USAF 2004b).

3.3.4.5 Wetlands

The objective of the *Clean Water Act* is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” This act, in conjunction with other acts such as the *Federal Agriculture Improvement and Reform Act*, the *North American Wetlands Conservation Act*, and the *Endangered Species Act*, as well as EO 11990 helps identify and protect wetlands. Wetlands are defined as lands where saturation with water is the dominant factor in determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. As stated in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, wetlands are areas that contain:

- 1) Hydrophytic vegetation - plants that grow in water or on soils that are periodically deficient in oxygen due to inundation of water;
- 2) Hydric soils – soils that are saturated, ponded, or flooded for a period of time where anaerobic conditions are created; and
- 3) Wetland hydrology – permanent or periodic inundation or soil saturation to the surface, that occur at least seasonally (USFW 1989).

A wetland delineation and evaluation took place at Scott AFB in 1992, and through this evaluation it was determined that a majority of the bottomland bordering Silver Creek, approximately 390 acres, was classified as a wetland (USAF 2004b). No proposed project sites are located within or adjacent to this wetland.

3.3.5 Biological Resources

Although much of Scott AFB is highly developed, there are areas that contain biological resources. These areas can be divided into three main groups consisting of forested wetlands or bottomlands, uplands, and grasslands (USAF 2003). The Integrated Natural Resources Management Plan, completed for Scott AFB in June 2003, details many of the biological resources present at the installation. These include a wide range of plants and animals as well as a diverse array of ecological habitats. An *Environmental Assessment of Selected Fauna and their Habitats at Scott AFB, Illinois* was completed at the installation in 2001. The assessment

included bird surveys, bat surveys, and botanical surveys of the majority of the high quality habitats (USAERDC 2002).

The results of the botanical survey did not identify the presence of any state or federally listed endangered/threatened plant species on the installation. The botanical surveys did identify that suitable habitat for both state and federally listed species exists within the Scott AFB boundaries (USAERDC 2002). However, no such habitat is located at the proposed project sites or in the area of the project sites.

The bat survey identified the presence of the federally endangered Indiana bat (*Myotis sodalis*) at Scott AFB. One female bat was captured during the survey conducted by personnel from the U.S. Army Engineer Research and Development Center in July 2001. The Indiana bat was identified along Silver Creek near the confluence of Carolina Creek (USAERDC 2002). Although suitable habitat for the Indiana bat is present at Scott AFB, none exists in the vicinity of the proposed project sites.

Two state endangered bird species have been documented at Scott AFB, both in 2001 and in 2004. According to the current Illinois Endangered Species Protection Board (IESPB) endangered and threatened species list, they are the Snowy Egret (*Egretta thula*) and the Little Blue Heron (*Egretta caerulea*) (IESPB 2004). Both bird species were observed during the completion of the EA in 2001 and during completion of the wetland delineation activities in 2004 (Hill 2004). Although suitable habitat exists for both bird species at Scott AFB, none is present in the vicinity of the proposed project sites.

Biological resources at the proposed project sites are limited to maintained lawns with ornamental plantings (USAF 2005c). Ornamental species planted at the site include: bald cypress, tulip tree, Norway maple, river birch, various pines and oaks, juniper, and barberry.

3.3.6 Socioeconomic Resources

Scott AFB is located in St. Clair County, Illinois, which is approximately 20 miles east of St. Louis, Missouri. The installation comprises approximately 2,848 acres and is located in predominately agricultural area. Scott AFB is immediately south of Interstate Highway 64, near the cities of O'Fallon and Belleville.

3.3.6.1 Population

According to the U.S. Census Bureau (USCB), the 2000 estimated population for St. Clair County was 256,082. Local communities within the Scott AFB region include Belleville, Lebanon, O'Fallon, and Mascoutah. According to the 2004 Scott AFB BGP, Belleville is a community of 41,410 residents and is located approximately 4 miles from Scott AFB (USAF 2004b). Lebanon is a residential community located 7 miles northeast of Scott AFB and has a population of 3,523 residents (USAF 2004b). O'Fallon lies northwest of Scott AFB and has a population of 21,910 (USAF 2004b). Mascoutah is located adjacent to Scott AFB in the southeast and has a population of 5,659 residents (USAF 2004b). There are approximately 14,248 persons employed by Scott AFB. In addition, the installation supports approximately 17,020 retiree personnel. The total Scott AFB community, on- and off-base, comprises

approximately 39,952 military and civilian personnel and their families (USAF 2005d). Table 3-3 contains a breakdown of installation personnel.

Table 3-3 Installation Population

| Personnel | Population |
|-----------------------------|-------------------|
| Active Duty Military | 6,850 |
| Air Force Reserve | 1,138 |
| Air National Guard | 854 |
| Civilians | 5,416 |
| | |
| Total Work Force | 14,258 |
| | |
| Family Members (Dependents) | 8,314 |
| Retired Military | 17,020 |
| | |
| Total Population | 39,592 |

Source: USAF 2005d

3.3.6.2 Housing

The 2004 Scott AFB Housing Requirements and Market Analysis (HRMA) defines the housing market area as covering a 60-minute commute, which contains Scott AFB and includes the market area counties of St. Clair and parts of Madison, Clinton, Washington, and Monroe, and the cities of Belleville, O'Fallon, Fairview Heights, Mascoutah, and Troy. The HRMA analyzes data from 2003 and makes projections through 2008. In 2003, there were an estimated 62,632 rental units within the housing market area; however 16,507 units were considered to be unsuitable by Air Force standards (USAF 2004c). Of the remaining suitable rental units, an estimated 3,445 were vacant (USAF 2004c). The 2004 HRMA states that in 2003 Scott AFB was responsible for supporting 7,574 military personnel, including both Air Force and tenant personnel, which is projected to remain constant until 2008 (USAF 2004c). The total number of military families for which Scott AFB is responsible to house is 5,192. The on-base military family housing (MFH) inventory is 1,430 units and according to the 2004 HRMA, the available MFH inventory has consistently been fully occupied. The HRMA estimated that there would be a deficit of 163 MFH units in 2008 (USAF 2004c).

3.3.6.3 Education

Children who live in permanent quarters on Scott AFB attend schools in the Mascoutah School District since there are no schools on the installation. The children of military personnel who live off-base are enrolled in the district where they live (USAF 2006b).

3.3.6.4 Economy

Scott AFB Economic Activity and Contribution. The following information is summarized from the 2005 Scott AFB Statistics Fact Sheet, 2003-2008 HRMA and information from the 2000 US Census Bureau.

Scott AFB generates economic activity in the region through employee payrolls, local procurements, and other expenditures. The total annual payroll in FY2003 was \$970 million. In FY2003, annual expenditures totaled \$412 million; construction totaled \$42 million; materials, equipment and supplies totaled \$190.8 million; and services totaled \$112 million. The number of on-base jobs, including both military and civilian, was 14,258 in 2004 (USAF 2005d).

Regional Employment and Income. The per capita personal income in the St. Louis MSA was \$32,613 in 2000 (USAF 2004c). According to the 2000 Census, per capita personal income in the St. Louis MSA was 6 percent higher than the United States average (USAF 2004c). In 2000, the St. Louis MSA unemployment rate was 3.5 percent, which was slightly lower than the Illinois average for that period (4.5 percent) and the U.S. average (4.0 percent) (USDOL 2000). In the St. Louis MSA, the leading nongovernmental industries in 2000 were educational, health, and social services (21.2 percent of working civilian population); manufacturing (14.3 percent of working civilian population); retail trade (10.6 percent of working civilian population); professional, scientific, management, administrative, and waste management services (9.4 percent of working civilian population); and arts, entertainment, recreation, accommodation, and food services (8.7 percent of working civilian population). Eleven percent of the population in the St. Louis MSA worked for federal, state, or local governments, with 2.3 percent employed by the Armed Forces (USCB 2000).

3.3.7 Land Use

Land cover at the proposed project sites for the permanent and temporary facilities at Scott AFB consists of mowed turf grass, ornamental trees, asphalt, a running track and two softball fields (USAF 2005c). The BGP categorizes land into multiple, basic land use categories. Described below are eight land use categories designated in the areas of the proposed project sites (USAF 2004b). Figure 3-2 displays the proposed project sites and land use categories for the area.

- Administrative. The administration areas house headquarters, personnel management, and similar office-type activities.
- Community Service. The community service category includes facilities that provide services to installation personnel, their families, and military retirees within the area.
- Community Commercial. The community support category includes facilities that support the day-to-day needs of installation personnel, their families, and military retirees.
- Medical. The medical land use category includes the clinic and medical storage facilities.
- Housing (Accompanied). Accompanied housing includes family housing, transitional living facilities (TLF), and TLF support.
- Housing (Unaccompanied). This category includes Unaccompanied Enlisted Personnel Housing, visitor housing, Visiting Officers Quarters, and Visiting Airman Quarters.
- Outdoor Recreation. Outdoor recreation areas include tennis courts, baseball/softball/multipurpose fields, family campgrounds, and parks.

- Open Space. Open space is undeveloped land that does not contain buildings or other built improvements.

The paragraphs below describe land uses for each proposed facility type and alternative.

MAF LSC Permanent Facility

Proposed Action, Alternative A, Alternative B

The MAF LSC permanent facility would remain in the same location under the Proposed Action, Alternative A, and Alternative B. The facility would be constructed upon a rectangular shaped parcel with mowed turf grass and ornamental trees. The BGP lists the permanent LSC facility site as a community service area. The area surrounding the LSC facility consists of a variety of land uses according to the BGP. To the north, there is Bucher Street (community service area) and an administrative area; to the east, there are two parking lots and unaccompanied housing (unaccompanied housing area); to the south, there is an administrative area; and to the west are the Shiloh/Galaxy Military Family Housing (accompanied housing area) and the 375th Medical Group Hospital Complex (medical area).

MAF LSC Temporary Facility

Proposed Action

Under the Proposed Action, the MAF LSC temporary facility would be constructed in the same location as that of the MAF LSC permanent facility. The location is categorized as a community service area and the surrounding area remains the same.

Alternative A

The location of the MAF LSC temporary facility under Alternative A would be in a community service area. The facility would be constructed on a parcel where a building previously stood. The location includes broken asphalt due to footers from the previous building and ornamental trees. To the north, there is a community service area; to the east, there is administrative area; to the south, there is a bowling alley (community service area); and to the west, there is a bank (community service area).

Alternative B

The location of the MAF LSC temporary facility under Alternative B would be in a community service area. Alternative B lies just northeast of Alternative A in a vacant parking area. The region to the north is a community service area; to the east, there is an administrative area; to the south, there is a movie theater (community service area); and to the west, there is a bank (community service area).

LEGEND

Land Use Area

-  Administration
-  Community (Commercial)
-  Community (Service)
-  Housing (Accompanied)
-  Housing (Unaccompanied)
-  Industrial
-  Medical
-  Open Space
-  Outdoor Recreation
-  Project Area
-  Base Boundary

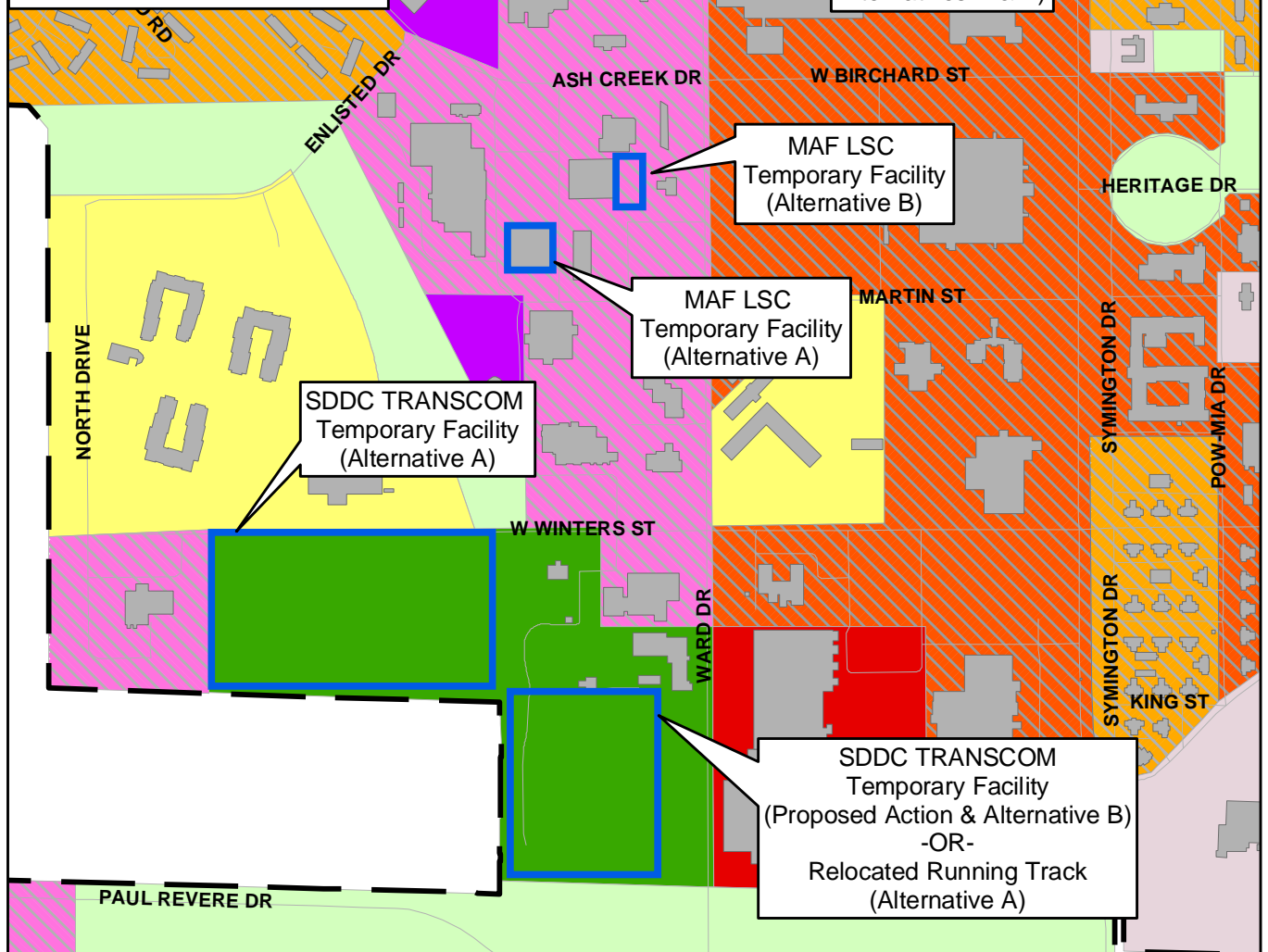
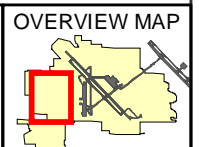


Figure 3-2
Land Use Map

Temporary SDDC
TRANSCOM Facility and
Temporary and Permanent
MAF LSC Facilities



0 125 250 500
Feet



SDDC TRANSCOM Temporary Facility

Proposed Action and Alternative B

The locations of the SDDC TRANSCOM temporary facility under the Proposed Action and Alternative B are the same. The SDDC TRANSCOM temporary facility would be constructed on an existing softball field. This location is in an outdoor recreation area. The region north of the softball field serves as a community service area; to the east, there is a community commercial area; to the south there is open space; and to the west there is a running track (outdoor recreation area).

Alternative A

The location of the SDDC TRANSCOM temporary facility under Alternative A would be on an outdoor recreation area. The facility would be constructed on an existing running track. The region to the north of the running track serves as unaccompanied family housing; to the east are softball fields; to the south is the base boundary; and to the west is a child care facility (community service).

3.3.8 Utilities and Transportation Systems

3.3.8.1 Solid Waste

Municipal solid waste management and compliance at Air Force installations are established in AFI 32-7042, Solid and Hazardous Waste Compliance. AFI 32-7042 incorporates by reference the requirements of RCRA Subtitle D, 40 CFR 240 through 244, 257, and 258, and all other applicable federal regulations, AFIs, and DoD directives. In general, AFI 32-7042 establishes the requirement for installations to have a solid waste management program that incorporates the following: a solid waste management plan; procedures for handling, storage, collection, and disposal of solid waste; record keeping and reporting; and recycling of solid waste, as addressed in AFI 32-7080, Pollution Prevention Program. All non-recyclable municipal and residential solid waste generated at Scott AFB is managed by a contractor and subsequently disposed of at an off-base landfill. Scott AFB operates a base-wide recycling program which includes industrial operations, offices, MFH, and tenant units. Construction and demolition wastes are disposed of as part of individual construction contracts (USAF 2004b).

3.3.8.2 Drainage

Scott AFB is located within the Silver Creek and Ash Creek drainage basins of the Kaskaskia River (USAF 2004d). Storm drainage at Scott AFB is provided by a series of enclosed storm sewers and open channels within 12 storm water basins. Seven defined storm water outfalls have been identified basewide. All proposed project sites are located within storm water drainage basin A1 which drains to Outfall Area 1 (USAF 2004d).

A review of the storm water drainage system in 2004 by an AMC infrastructure team rated the drainage system as being degraded and in need of immediate attention to prevent damage due to flooding at various areas throughout the installation (USAF 2004b). Recommendations for improvements to the drainage system include adding detention basins; altering pipe sizes, slopes

and flow directions; and installing two pump stations west of Ward Drive. This would require permitting of two new outfalls (USAF 2004b).

In 2003, Scott AFB was issued a General NPDES Permit for Storm Water Discharges from Industrial Activities which requires submission of an annual facility inspection report to the IEPA (USAF 2004d).

The NPDES General Permit also requires the installation to implement a Storm Water Pollution Prevention Plan (SWPPP) to include best management practices (BMPs). BMPs could include any processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff. Scott AFB employs both structural and non-structural BMPs, such as housekeeping maintenance, inspection and maintenance of storm water management devices, management of runoff, spill prevention and response, and construction and erosion controls. The topography and soils at Scott AFB are not subject to significant erosion or sedimentation; however, any construction activities of greater than one acre occurring on the installation require implementation of erosion control procedures (USAF 2004d). Storm water management practices which could be implemented during construction include use of detention basins, infiltration structures, surface contouring and planting to maximize infiltration of runoff, specification of construction finish materials to minimize runoff, drainage manipulations, mowing, mulching, sediment fencing, phased construction timing, use of straw bales to trap sediments, and use of diversion channels (USAF 2004d). The NPDES storm water program requires a Phase I permit for discharges relating to large construction activities disturbing five acres or more of land and a Phase II permit for discharges relating to small construction activities disturbing between one and five acres.

3.3.8.3 Transportation

Scott AFB is located along Highway 158, approximately 20 miles east of St. Louis, Missouri. Interstate 64, located north of the installation, provides east-west access to Scott AFB and interconnects the installation with the interstate, state, and local road network (USAF 2004b). Five gates provide access to the installation—the Belleville Gate, Shiloh Gate, Patriots Landing Gate, Mascoutah Gate, and Wherry Gate. The region's light rail mass transit system, MetroLink, extends to Scott AFB and multiple bus routes travel through the installation to the rail station. According to the 2004 General Plan, the East Side-Patriots Landing MetroBus route travels along West Winters Street and Ward Drive adjacent to potential construction sites for the temporary SDDC TRANSCOM facility and the running track. A portion of the Norfolk-Southern Rail line passes through Scott AFB and is located immediately adjacent to the potential construction site for the temporary SDDC TRANSCOM facility (under the Proposed Action and Alternative B) or relocated running track (under Alternative A). All of the proposed project sites are accessible via arterial roads (USAF 2004b).

The permanent MAF LSC facility would be located near the intersection of Ward Drive and West Clay Street and under the Proposed Action the temporary MAF LSC facility would be located near the same intersection. Under Alternative A, the temporary MAF LSC facility would be located along West Martin Street at the point at which West Martin Street curves north. Under Alternative B, this facility would be located southwest of the intersection of Ward Drive and Ash Creek Drive. The temporary SDDC TRANSCOM facility under the Proposed Action

and Alternative B would be located along Ward Drive, south of West Winters Street. Under Alternative A, the temporary SDDC TRANSCOM facility would be located south of West Winters Street and the running track would be relocated along Ward Drive, south of West Winters Street.

In July 2003 a field survey was conducted at Scott AFB with traffic counts collected at various intersections. Traffic counts at the intersection of Ward Drive and West Winters Drive over three peak hours totaled 4,749 vehicles. The resultant Traffic and Safety Engineering Study released in September 2003 recommended installation of a traffic signal or a modern roundabout at this intersection (Gannett Fleming 2003). A traffic signal, which helps alleviate delays and congestion at this intersection, was installed as a result of this recommendation. Traffic counts at other intersections related to the proposed and alternative actions were not collected during the 2003 field survey; therefore, traffic counts at these intersections are not known at this time.

3.3.8.4 Electricity/Natural Gas

Electricity and natural gas are provided to Scott AFB by AmerenIP. Scott AFB electrical systems include 14 substations on the installation. Backup power systems are also in place and none of the mission critical generators at Scott AFB are at the end of their 20-year life cycle or have excess run-hours accumulated. In 2004, the AMC infrastructure team rated the electrical systems at Scott AFB as degraded. The natural gas systems were rated as adequate; however, the portion of the system maintained by AmerenIP was not evaluated. The natural gas distribution system has the primary function of providing an adequate supply to meet the natural gas energy requirements of existing and future facilities (USAF 2004b).

Of the 14 electric substations at Scott AFB, 7 are major substations, 6 are minor substations, and one is a housing substation. The proposed project sites for the temporary SDDC TRANSCOM facility are served by substation 9. The proposed project sites for the temporary MAF LSC facility as described in Alternatives A and B are served by substation 5. According to a short circuit analysis/coordination study conducted in 2003, substation 5 is near the end of its useful life (USAF 2004b). The proposed sites for the temporary MAF LSC facility location, as described in the Proposed Action, as well as the permanent MAF LSC facility are served by substation 6 (USAF 2004b).

3.3.9 Safety and Occupational Health

Factors involving primary occupational safety and health issues are addressed in 29 CFR Occupational Safety and Health Standards. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB. If the proposed or alternative actions were implemented, all applicable provisions of the US Army Corps of Engineers Manual EM 385-1-1, "General Safety Requirements," must be followed.

The proposed permanent MAF LSC facility would be located on the site of a former officer's club and swimming pool. The swimming pool was collapsed in place, and covered with soil prior to reseeded of the entire site. In addition, as was discussed in Section 3.3.3, the potential site of the SDDC TRANSCOM temporary facility, as described under the Proposed Action and Alternative B, is known to contain soils contaminated with hydrocarbons. Section 6 of the US

Army Corps of Engineers Manual EM 385-1-1 details worker protections, safety requirements, and the appropriate sources for determining exposure levels if hazardous materials are encountered during the construction process.

Unified Facilities Criteria 4-010-01 presents guidelines for anti-terrorism/force protection at military installations. These guidelines include such topics as access to facilities, facility siting, exterior design, interior design, and landscaping. In the event of a terrorist attack, the intent of this guidance is to improve security, minimize fatalities and limit damage to facilities.

3.3.10 Environmental Management – Pollution Prevention

A majority of individuals who make Scott AFB their place of work or residence participate in the recycling program. The US Air Force recognizes the importance of pollution prevention in protecting the environment, achieving compliance objectives, and reducing waste disposal costs. All ferrous and non-ferrous metals from construction projects at Scott AFB must be recycled. Contractor are also required to recycle cardboard, mark 1 and 2 plastic bottles, metals, glass, aluminum and steel cans, and mixed paper at the Base Recycling Center in Building 3286 (USAF 2005c).

3.3.11 Geology and Soils

Regional geology in the vicinity of Scott AFB consists of Paleozoic sedimentary rocks, ranging from Cambrian through Pennsylvanian, and Cenozoic (Quaternary) unconsolidated materials. Bedrock units consist of Pennsylvanian Age Carbondale and Modesto Formations concealed by unconsolidated Pleistocene deposits in the vicinity of Scott AFB. Bedrock underlies Scott AFB at approximately 85 feet bgs.

The Carbondale Formation is comprised of gray shale with trace amounts of coal, limestone, sandstone, claystone, and siltstone. The formation is approximately 175 feet thick. The Modesto formation consists of sediments that are similar to the Carbondale Formation; however, the coal seams are thinner and the limestone seams thicker than those found in the Carbondale series.

The surficial geology at the proposed project sites consist of Mascoutah silty clay loam from 50 to 75 feet with a 0-3 percent slope (USDA 2004).

3.3.12 Environmental Justice

Scott AFB lies 20 miles east of St. Louis in St. Clair County. St. Clair County has a variety of areas that range from urban regions to small rural towns just on the outskirts of Scott AFB. In the year 2000, the population of St. Clair County was approximately 67.9 percent Caucasian and 34.3 percent minorities. The predominant minority described in St. Clair County was African-American; 2.2 percent of the county's population was considered Hispanic (USAF 2005c). There are no low-income or minority disadvantaged populations in the area of the proposed project sites.

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Chapter 4

Environmental Consequences

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter describes the potential environmental impacts that are likely to occur as a result of implementation of the proposed or alternative actions. The No-Action Alternative provides a baseline against which the impacts of the proposed and alternative actions can be compared. The Proposed Action and the No-Action Alternative could generate no impact to environmental issues, or encompass environmental consequences that may fall into the categories described in Table 4-1. Any resultant irreversible or irretrievable commitments are noted. Criteria and assumptions used to evaluate potential impacts are discussed at the beginning of each section.

4.2 DISCRIPTION OF THE EFFECTS OF ALL ALTERNATIVES ON THE AFFECTED ENVIRONMENT

Table 4-1 Description of Environmental Consequences

| Word | Definition |
|---------------|--|
| Short-term | effects caused during the construction and/or initial operation of the action |
| Long-term | effects caused after the action has been completed and/or the action is in full and complete operation or effects of the action if not approved |
| Irreversible | those effects caused by the proposal that cannot be reversed |
| Irretrievable | effects caused by an alternative that change outputs or commodities (e.g. trees, cattle, hiking fishing) of land's use <i>and</i> must be reversible |
| Positive | constructive, progressive effects |
| Negative | harmful, destructive, unsafe, risky |
| Minor | trivial, irrelevant, inconsequential |
| Major | vital, primary, important |
| Adverse | unfavorable, undesirable, harsh |
| Direct | caused by the action and occur at the same time and place |
| Indirect | caused by the action and effects occur later in time or farther removed in distance, but reasonable foreseeable |
| Cumulative | non-related actions that have, are, or probably would occur in the same locality |

A **significant** impact, as it applies to NEPA, requires considerations of both context and intensity. The following descriptions are brief and do not cover all aspects of the terminology. Context means that the significance of an action must be analyzed in several arenas, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed and alternative actions. Intensity refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. Impacts may be both beneficial and adverse. Intensity also includes the degree to which the proposed and alternative actions affect public health or safety. Table 2-1 provides a summary of the environmental resources that are determined to be impacted by the proposed and alternative actions.

4.2.1 Air Quality

4.2.1.1 Proposed Action

A **short-term minor** increase in emissions from equipment and vehicles would occur during the construction phase of the Proposed Action. Fugitive dust and particulate matter would be emitted into the air from access roads, stockpiles, and/or other work areas. These emissions would be temporary and would return to pre-construction levels once the construction was completed. Watering of the disturbed area would be the preferred method of controlling fugitive dust, especially if a nuisance or road hazard due to fugitive dust particulate arises, or is anticipated due to windy or dry weather conditions.

A conformity determination would not be required, as the total of direct and indirect emissions from construction activities at the site of the Proposed Action would be below *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Table 4-2 shows the total projected direct and indirect air emissions from the Proposed Action over the expected duration of construction activities. Additional air emission calculations can be found in Appendix C. Regionally significant air emissions would be those that represent 10 percent or more of the overall regional emissions for each pollutant. As such, projected **short-term minor** air emissions from the Proposed Action do not approach regionally significant levels. All projected annual air emissions for the Proposed Action are less than one half of one percent of the overall regional emissions presented in Table 3-2.

Table 4-2 Projected Air Emissions from Proposed Action and *De minimus* Thresholds

| | Total Projected Emissions (tpy) | | | | |
|--|---------------------------------|------|-----------------|-----------------|-------------------------------|
| | CO | VOC | NO _x | SO _x | PM ₁₀ ^a |
| CY 2006 | 4.3 | 8.7 | 9.2 | 1.0 | 9.1 |
| CY 2007 | 4.3 | 10.6 | 9.0 | 1.0 | 10.3 |
| CY 2008 | 0.9 | 0.2 | 2.2 | 0.2 | 2.8 |
| CY 2009 | 0.5 | 0.1 | 1.1 | 0.1 | 1.4 |
| <i>de minimus</i> threshold ^b | 100 | 50 | 100 | - | - |

Notes:

CO=carbon monoxide

NO_x=nitrogen oxides

CY=calendar year

SO_x=sulfur oxides

tpy=tons per year

PM₁₀=particulate matter equal or less than 10 micrometers in aerodynamic diameter

^a PM_{2.5} emissions assumed to be the same as PM₁₀ emissions.

^b *De minimus* thresholds as specified in 40 CFR 93.153(b) for non-attainment designations applicable to AQCR #070- moderate non-attainment area for ozone and PM_{2.5} and limited maintenance area for CO.

Minor long-term increases in air emissions for NO_x, VOC, and CO would be expected as a result of motor vehicles operated by the 164 inbound personnel. This increase is expected to be negligible when compared to overall regional motor vehicle emissions.

The Proposed Action would be in compliance with, or consistent with, all relevant requirements and milestones contained in the Illinois State Implementation Plan. Contractor(s) and subcontractor(s) of this project must comply with these regulations, including 42 USC 7418(a) (state and local requirements).

4.2.1.2 Alternative A

Short-term minor impacts to air quality for Alternative A would be similar to the Proposed Action. There would be slightly higher **short-term minor** air emissions associated with relocation of the running track but emissions would remain below *de minimus* levels.

4.2.1.3 Alternative B

Short-term minor impacts to air quality for Alternative B would be similar to the Proposed Action. There would be slightly lower **short-term minor** air emissions due to the decrease in the size of the MAF LSC temporary facility.

4.2.1.4 No-Action Alternative

There would be **no impact** to air quality issues if this alternative were selected.

4.2.2 Noise

4.2.2.1 Proposed Action

The primary source of noise would result from construction activities, which would be generated by heavy equipment and vehicles involved in site preparation, foundation preparation, construction, and finishing work. Construction activities would be expected to occur between 7:00 a.m. and 5:00 p.m. It is important to note that construction sound levels within nearby buildings would be diminished because of sound transmission loss through building walls and windows. Noise reduction within residences generally ranges from 18 to 27 dB depending on the type of walls and windows; therefore, housing near the construction site would only be subject to a **short-term minor** increase in sound levels during construction hours (USDOT 1992). Persons utilizing the running track during construction hours could be subject to a **short-term minor** increase in noise levels; however, assuming that noise from the construction equipment radiates equally in all directions, the sound intensity would diminish inversely as the square of the distance from the source. Since the running track is approximately 250 feet from the construction site, noise levels would be diminished by 20-30 dB. Under this alternative, the child care facility would not be impacted as it is located over 1,000 feet from the construction site.

There is a possibility of **short-term minor**, localized speech interference or annoyance near construction zones. Implementation of the Proposed Action would generate **short-term minor** impacts throughout the construction phase of the project. Post-construction noise levels surrounding the construction areas would remain at or near pre-construction levels. Because construction activities are temporary and the land use would not change, no long-term impacts to noise would occur.

4.2.2.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action, except that the child care facility would be subject to a **short-term** sound level increase. Sound within the building

would be diminished because of sound transmission loss through building walls and windows; however, playground areas outside the building would be subject to an increased sound level.

Also under Alternative A, more buildings would be exposed to construction noise due to the location of the MAF LSC temporary facility. However, as in the Proposed Action, construction sound levels within nearby buildings would be diminished because of sound transmission loss through building walls and windows.

Best management practices could be employed to diminish sound levels at nearby noise sensitive receptors. These include properly operating and maintaining equipment (e.g., possessing mufflers, gaskets, and sharpening and lubricating blades), fitting silencers to combustion engines, tightly fastening machinery covers or panels, isolating vibrating parts/damping, constructing sound barriers to reduce propagation, or shutting off/idling machinery between work periods (Eaton 2000; Suter 2002; and Tempest 1985).

4.2.2.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action, except that more buildings would be exposed to construction noise due to the location of the MAF LSC temporary facility. However, as in the Proposed Action, construction sound levels within nearby buildings would be diminished because of sound transmission loss through building walls and windows.

4.2.2.4 No-Action Alternative

Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.3. Therefore, there would be **no impact** from noise-related issues if this alternative were selected.

4.2.3 Wastes, Hazardous Materials and Stored Fuels

With regard to AOC 18, it is assumed that groundwater would not be used as a potable or non-potable water source (e.g. car washing, lawn watering, showering) at any of the proposed project sites.

4.2.3.1 Proposed Action

Under this alternative, there is the potential for contaminated soils to be encountered during excavations for footers, storm water sewers, and other underground utilities during the construction of the SDDC TRANSCOM temporary facility. **No impacts** related to potential contamination are expected provided workers follow the required Health and Safety Plan and Emergency Response Plan. These plans address the proper personal protective equipment and necessary safety precautions required to minimize worker and public exposure to potential contamination. Any potentially contaminated soils encountered during excavation would be stockpiled on-site and disposed of in accordance with appropriate Scott AFB, state, and federal regulations. It is also recommended that the contractor implement a spill prevention plan for construction activities.

A potential **long-term positive impact** may result from implementation of the Proposed Action, since it is expected that any engineered barrier (e.g. asphalt or concrete parking area) constructed for the SDDC TRANSCOM temporary facility would be permanently left in place once a permanent SDDC TRANSCOM facility is constructed and the temporary facility is removed. This engineered barrier would reduce the potential for exposure from contaminated soils.

No impacts related to LBP or ACM are expected from implementation of the Proposed Action. ACM, LBP, paints containing chromate, and/or transformers, capacitors, and other materials containing polychlorinated biphenyl fluid are prohibited from use during implementation of the Proposed Action. If any ACM are excavated during construction activities, the contractor would be responsible for managing the waste in accordance with established environmental management plans and state and federal regulations.

Hazardous materials such as petroleum products used during construction activities would be restricted. If a contractor cannot avoid generating hazardous waste, the waste must be disposed of according to contract specifications and environmental laws. Improper usage of hazardous materials or disposal of hazardous wastes during construction activities could result in Notices of Violation from the IEPA, leading to possible fines and litigation.

4.2.3.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action, with the following exceptions.

There is the potential for contaminated soils to be encountered during construction of the relocated running track. **No impacts** related to potential contamination are expected provided workers follow the required Health and Safety Plan and Emergency Response Plan. These plans address the proper personal protective equipment and necessary safety precautions required to minimize worker and public exposure to potential contamination. Any potentially contaminated soils encountered during construction would be stockpiled on-site and disposed of in accordance with appropriated Scott AFB, state, and federal regulations.

A potential **long-term positive impact** may result from implementation of Alternative A since it is expected that the physical barrier provided by the running track would reduce the potential for exposure to contaminated soils. In addition, grass and other vegetation planted around the running track would help to suppress contaminated soils from becoming airborne in the form of dust and thereby reducing the risk of human exposure to contaminated soils through inhalation.

4.2.3.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.3.4 No-Action Alternative

There would be the potential for a **long-term adverse impact** if the No-Action Alternative is selected. Implementation of the Proposed Action would create an engineered barrier that would reduce the potential for exposure to contaminated soil. If the No-Action Alternative is chosen, there would be the potential for human exposure to contaminated soil located at the softball

fields. The potential for exposure to contaminated soil would remain until the site was remediated or an engineered barrier was constructed over the contaminated soils.

4.2.4 Water Resources

4.2.4.1 Proposed Action

No impacts to groundwater quality or quantity are anticipated from the implementation of the Proposed Action. Groundwater beneath the sites are anticipated to be approximately 5 to 20 ft bgs. Excavation for permanent and temporary facilities is not expected to reach groundwater levels. As a result, groundwater is not likely to be encountered. If groundwater were encountered, care would be taken during construction activities to ensure that groundwater resources are protected from contamination. Likewise, in the event groundwater is encountered, care would be taken during construction activities to ensure that workers are protected from potentially contaminated shallow groundwater associated with AOC018 (see Sections 3.3.3 and 4.2.3).

There is potential for a **short-term impact** to surface water quality from increased sediment loading of surface water during the initial construction activities and increased water usage. This potential is **short-term** and is manageable through implementation of a SWPPP along with the incorporation of BMPs for sediment control during construction. Implementation of these actions would minimize potential water quality problems. Proper BMPs vary according to site conditions but may include hay bales, silt fences, exclusion devices, and staging of construction activities. Water usage would increase due to the increase in number of personnel utilizing the proposed permanent and temporary facilities. The amount of additional water use would be negligible.

The Proposed Action would have **no adverse impacts** on wetlands or floodplains. Floodplains and wetlands are not located within the project sites. All appropriate measures and BMPs would be in place to minimize the potential for an increase in sediment loading.

4.2.4.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action A.

4.2.4.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.4.4 No-Action- Alternative

Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.3.4. Therefore, there would be **no impact** to surface water, ground water, wetlands, or floodplains if there alternative were selected.

4.2.5 Biological Resources

4.2.5.1 Proposed Action

There are no significant or unique biological resources located at the Proposed Action sites. Therefore, **no adverse impacts** to biological resources are anticipated from implementation of the Proposed Action. In locations where it is feasible, the existing landscaping would be incorporated into the design of the new facilities. Some new landscaping and revegetation is also expected at the construction sites.

4.2.5.2 Alternative A

There are no significant or unique biological resources located at the Alternative A sites. Therefore, **no adverse impacts** to biological resources are anticipated from implementation of Alternative A. In locations where it is feasible, the existing landscaping would be incorporated into the design of the new facilities.

4.2.5.3 Alternative B

There are no significant or unique biological resources located at the Alternative B sites. Therefore, **no adverse impacts** to biological resources are anticipated from implementation of Alternative B. In locations where it is feasible, the existing landscaping would be incorporated into the design of the new facilities.

4.2.5.4 No-Action Alternative

Under the No-Action Alternative, there would be no change to the baseline conditions described in Section 3.3.6. **No impact** to biological resources would result from the implementation of this alternative.

4.2.6 Socioeconomic Resources

The analysis below for socioeconomic resources is based on the following assumptions:

Population. There will be an arrival of 164 military personnel to Scott AFB between March and September 2006 (Varilek 2006). It is assumed that the military personnel will be accompanied by a spouse and one child. In total there will be an addition of 492 individuals to the St. Clair County population.

Housing. According to the 2004 HRMA (USAF 2004c) there is currently a 163 unit shortage of on-base housing for arriving military personnel and their families. It is therefore assumed that all arriving personnel would be housed off-base unless on-base housing becomes available prior to their arrival.

Education. There are no schools on Scott AFB. There are numerous public and private schools in the area surrounding Scott AFB. It is assumed the nearby schools would have sufficient room to accommodate the incoming students.

Economy. Construction for the permanent and temporary facilities would begin in May 2006 and would be completed by July 2009. The construction of the facilities would be spread intermittently through this time period. Due to this schedule, economic impacts associated with construction are expected to vary as the construction periods begin and end.

4.2.6.1 Proposed Action

Population: Due to the addition of 492 individuals to the St. Clair County population, there would be a **long-term impact** on the population in the local community.

Housing. Unless on-base housing becomes available, all arriving military personnel and their families would be required to live off-base. This would result in a decrease in available off-base housing units; therefore, there would be a **long-term impact** on housing.

Education. There would be a **long-term impact** to area schools due to the enrollment of an additional 164 children.

Economy. Expenditures incurred during construction would result in a **positive short-term impact** on the local economy. Also, the addition of 492 individuals to the local community would result in a **positive long-term impact**.

4.2.6.2 Alternative A

Impacts for Alternative A for population, housing, education, and economy are the same as those for the Proposed Action.

4.2.6.3 Alternative B

Impacts for Alternative B for population, housing, education, and economy are the same as those for the Proposed Action.

4.2.6.4 No-Action Alternative

Population: Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.3.7.1. Therefore, there would be **no impact** on population.

Housing. Under the No-Action Alternative, there would be no change to baseline conditions described in Section 3.3.7.2. Therefore, there would be **no impact** on housing.

Education. Under the No-Action Alternative, there would be no change to baseline conditions described in Section 3.3.7.3. Therefore, there would be **no impact** on education.

Economy. Current inefficiencies would continue under the No-Action Alternative. For example, predicted savings of \$1.2 billion over 20 years resultant from BRAC recommendations would not be realized (USAF undated). This would result in a **long-term adverse impact** on economy.

Other. Under the No-Action Alternative, the temporary facility and associated infrastructure would not be constructed; therefore adequate facility space for the SDDC TRANSCOM Consolidation would continue to be unavailable. Failure to consolidate the SDDC Operations Center with the TACC and the TRANSCOM DDOC would negate the positive effects of the BRAC recommendation and would propagate wasteful redundancy of personnel and communications infrastructure. Adequate space would have to be found via off-base leases, impacting the mission accomplishment of TRANSCOM, and requiring significant work stoppages and alterations as personnel adjust to new and difficult work separations. Additionally, force protection and security would not be maintained in such a situation for Headquarters personnel (USAF undated). Therefore, there would be **long-term adverse impacts** to the AMC, and therefore the TRANSCOM mission.

4.2.7 Land Use

4.2.7.1 Proposed Action

The construction of the MAF LSC permanent and temporary facilities would involve the conversion of the current land use at that location from a community service area with mowed turf grass and ornamental trees to an administrative area (USAF 2005c). The construction of the SDDC TRANSCOM temporary facility would involve the conversion of an outdoor recreation area to an administrative area (USAF 2005c). These new administrative areas would be compatible with adjacent land uses; therefore, there would be **no impacts** to land use (USAF 1998).

4.2.7.2 Alternative A

Land use changes resulting from construction of the MAF LSC permanent facility would be the same as in the Proposed Action and would have **no impact** on the current and future land use (USAF 1998). The construction of the MAF LSC temporary facility would involve the conversion of the current land use from a community service area to an administrative area. The construction of the SDDC TRANSCOM temporary facility would involve the conversion of an outdoor recreation area to an administrative area. These new administrative areas would be compatible with adjacent land uses; therefore, there would be **no impacts** to land use (USAF 1998). The relocation of the running track to an outdoor recreation area is compatible with the current and future land use and no land use conversion would be necessary. Therefore, there would be **no impact** to land use resulting from relocation of the running track.

4.2.7.3 Alternative B

Land use changes resulting from construction of the MAF LSC permanent facility would be the same as in the Proposed Action and would have **no impact** on the current and future land use at this site (USAF 1998). The construction of the MAF LSC temporary facility would involve the conversion of the current land use from a community service area to an administrative area. This new administrative area would be compatible with adjacent land use; therefore, there would be **no impacts** to land use (USAF 1998). Land use changes resulting from construction of the SDDC TRANSCOM temporary facility would be the same as in the Proposed Action and would have **no impact** on the current and future land use (USAF 1998).

4.2.7.4 No-Action Alternative

Under the No-Action Alternative, there would be no change to the baseline conditions described in Section 3.3.8. Therefore, there would be **no impact** to land use.

4.2.8 Utilities and Transportation Systems

4.2.8.1 Solid Waste

The solid waste generated during project activities would consist of spent building materials such as solid pieces of concrete and asphalt, metals, and lumber. The contractor would be responsible for disposing of solid waste in accordance with all federal, state, and local laws.

4.2.8.1.1 Proposed Action

Implementation of the Proposed Action would result in a **short-term minor** increase in solid waste generation for the installation. The increase would include wastes from construction of the temporary and permanent facilities and parking lots and the generation of these wastes would be spread out over approximately 18 months. As a result of 164 inbound personnel there would also be a **long-term minor** increase in administrative solid waste generated at these new facilities and a **long-term minor** increase in municipal solid waste generated in the local area. Recycling, as described in Section 4.2.10, would reduce the solid waste generated as a result of implementation of the Proposed Action.

4.2.8.1.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action, except that additional waste would be generated as a result of the running track relocation. Impacts for this alternative would still be **short-term and minor**.

4.2.8.1.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action, except that construction waste generated would be slightly less since the MAF LSC temporary facility would be half the area as the one constructed under the Proposed Action. Impacts for this alternative would still be **short-term and minor**.

4.2.8.1.4 No-Action Alternative

Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.9.1. Therefore, there would be **no impact** on solid waste generation.

4.2.8.2 Drainage

4.2.8.2.1 Proposed Action

The Proposed Action includes construction activities and infrastructure installation, including tie-in to existing utilities. These activities would require excavation and disturbance of areas currently stabilized with grass or pavement and may require installation of utility lines beneath parking lots and sidewalks. With the construction of the two temporary facilities, the permanent

facility, and associated parking lot space, the overall amount of impervious cover would increase approximately 345,500 square feet (sq ft). Since implementation of the Proposed Action would disturb sites both greater than five acres and between two and five acres of land, a SWPPP would be required for each site, as well as a Phase I and II NPDES permit. **Short-term impacts** to drainage would be mitigated by implementation of the SWPPP.

4.2.8.2.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action, except that a site erosion control plan and a SWPPP would also be required for construction of the relocated running track. Also, construction of impervious cover would be reduced to approximately 325,500 sq ft since the MAF SLC temporary facility would be constructed in an area of existing impervious cover.

4.2.8.2.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action, except that total addition of impervious cover would be reduced to approximately 325,500 sq ft since the MAF LSC temporary facility would be constructed in an area of existing impervious cover. Site erosion control plans and SWPPPs would still be required for the temporary SDDC TRANSCOM facility and associated parking lot.

4.2.8.2.4 No-Action Alternative

Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.9.2. Therefore, there would be **no impact** on drainage.

4.2.8.3 Transportation

4.2.8.3.1 Proposed Action

There would be a **minor long-term** increase in traffic counts on the installation and in the local area resulting from the addition of 164 personnel and their families to Scott AFB. There would also be an additional **minor short-term** increase in traffic counts associated with a variety of tradespersons entering the installation on a daily basis to accomplish construction of the temporary and permanent facilities. Increased traffic counts would be expected in the early morning hours as workers arrive at their job site and in the early evening as workers depart for the day. This would typically coincide with the normal commuting patterns of Scott AFB occupants who work similar hours. The slight increase in traffic would potentially cause delays to the existing MetroBus route traveling along West Winters Street and Ward Drive adjacent to potential construction sites. Utility line connection activities would have the potential to require road closures, resulting in **short-term** traffic delays.

Transportation of heavy equipment, materials, and roll-off dumpsters to and from the construction locations would add additional **short-term** traffic on the installation and on public roads that connect to the installation. The heavy loads that would be expected from this type of traffic could adversely affect road surface conditions if the roadway section is not adequate to support continued heavy equipment traffic for an extended period. Repair of small roadway sections may be required following completion of the construction projects.

4.2.8.3.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action.

4.2.8.3.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.8.3.4 No-Action Alternative

Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.9.3. Therefore, there would be **no impact** on transportation.

4.2.8.4 Electricity/Natural Gas

4.2.8.4.1 Proposed Action

Implementation of the Proposed Action would cause **minor long-term** increases in overall electrical and natural gas consumption on Scott AFB due to the addition of administrative facilities. Electrical and natural gas lines for the new temporary and permanent facilities would be installed during construction and would tie in to existing utility lines. The addition of 164 personnel and their families would also result in **minor long-term** increases in overall residential electrical and natural gas consumption in the area.

4.2.8.4.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action.

4.2.8.4.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.8.4.4 No-Action Alternative

Under the No-Action Alternative, there would be no change in the baseline conditions described in Section 3.9.4. Therefore, there would be **no impact** on electricity and natural gas consumption.

4.2.9 Safety and Occupational Health

4.2.9.1 Proposed Action

No impacts to the health of occupation and construction workers are anticipated to occur with implementation of the Proposed Action, provided workers comply with OSHA regulations and standards during construction activities.

The MAF LSC facility location is on the site of a former officer's club and swimming pool. The swimming pool was collapsed in place, and covered with soil before the entire site was re-seeded. The swimming pool would require removal and clean fill materials would need to be brought in from off-site and compacted prior to construction of the permanent MAF LSC facility. In addition, the proposed location of the SDDC TRANSCOM temporary facility is known to contain soils contaminated with hydrocarbons. Construction workers would follow an

approved Health and Safety Plan and Emergency Response Plan to minimize exposure to contaminated soils, excavations, and unstable soils.

4.2.9.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action, with the following exceptions.

The proposed site of the relocated running track is known to contain soils contaminated with hydrocarbons. Construction workers would follow an approved Health and Safety Plan and Emergency Response Plan to minimize exposure to contaminated soils, excavations, and unstable soils. Therefore, **no impacts** to the health of occupation and construction workers are anticipated to occur with implementation of Alternative A provided workers comply with OSHA regulations and standards during construction activities.

Although not an impact to the health of occupation and/or construction workers, it should be noted that during the time the running track is being relocated and is not available for use, a **short-term adverse impact** is anticipated for regular users of the running track. During this time, regular users would be required to find other areas for walking, running, jogging, etc. These areas may include sidewalks, roads, and park trails which carry risks such as increased traffic, uneven walking surfaces, and reduced lighting.

4.2.9.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.9.4 No-Action Alternative

There would be **no impacts** to safety and health if the No-Action Alternative were implemented. According to the *Management Action Plan* (USAF 2001), there is little risk of exposure to contaminated soils by the industrial and commercial workers that currently work around the installation.

4.2.10 Environmental Management – Pollution Prevention

4.2.10.1 Proposed Action

In support of national environmental efforts, the selected building contractor would be involved in the recycling process during the construction of the permanent and temporary facilities. All ferrous and non-ferrous metals from the project would be recycled. The contractor would also be required to recycle cardboard, mark 1 and 2 plastic bottles, metals, glass, aluminum and steel cans, and mixed paper (USAF 2005c). Depending on local markets for recyclables and/or the ability to reuse typical demolition and construction waste materials, opportunities to recycle metal, wood, land clearing debris and concrete, asphalt, brick, and gypsum may be present. Many items, such as flooring, framing lumber, doors, windows, cabinets, hardware, plumbing fixtures, ductwork, wiring and piping may also be suitable for salvage by local contractors (USAF 2004b). All recyclable materials would be taken to the Base Recycling Center in Building 3286 located on South Drive.

Implementation of the Proposed Action would generate asphalt waste during the construction of the SDDC TRANSCOM temporary facility on the softball fields. This increase in recyclable asphalt would create a **short-term** increase in recyclable material received by the Base Recycling Center. There would also be an increase of administrative waste produced by the permanent and temporary facilities, once completed, which would result in a **minor long-term** increase in recyclable material received by the Base Recycling Center.

4.2.10.2 Alternative A

Impacts for Alternative A are the same as the Proposed Action except that additional recyclable asphalt would be generated due to the relocation of the running track.

4.2.10.3 Alternative B

Impacts for Alternative B are the same as the Proposed Action except that less recyclable material would be produced by the construction of the MAF LSC temporary facility, due to its reduced size.

4.2.10.4 No-Action Alternative

Under the No-Action Alternative there would be no change from the baseline conditions described in Section 3.3.11. Therefore, there would be **no impact** to environmental management or pollution prevention programs.

4.2.11 Geology and Soils

4.2.11.1 Proposed Action

No adverse impacts to soils are anticipated from the implementation of the Proposed Action. Sub-surface soils at the current location of the softball fields currently contain elevated levels of contaminants and it is not anticipated that the construction of the SDDC TRANSCOM temporary facility would contribute to further contamination. Placing a concrete or asphalt parking lot and the temporary facility over the existing contaminated soils would limit the potential for exposure to these soils.

Construction contractors would use erosion control measures consistent with the Natural Resources Conservation Service Illinois Urban Manual. Necessary measures and BMPs would be implemented to reduce soil erosion and siltation during construction. Interim measures to prevent erosion during construction would be implemented and could include the installation of staked straw bales, sedimentation basins, and temporary mulching. All construction areas with bare soil would be mulched and seeded immediately upon completion of construction.

Phase I of the NPDES storm water program presently covers discharges from large construction activities disturbing five acres or more of land. Phase II of NPDES storm water program covers small construction activities disturbing between one and five acres. Phase II became final on December 8, 1999, with small construction permit applications due by March 10, 2003. "Disturbance" refers to exposed soil resulting from activities such as clearing, grading, and excavating. Construction activities can include road building, construction of residential houses,

office buildings, and industrial sites, and demolition. Implementation of the Proposed Action would disturb sites both greater than five acres and between two and five acres of land. Therefore, Scott AFB would need to apply for both a Phase I and a Phase II NPDES permit.

Implementation of the Proposed Action would have **no impact** to soils or geological resources, provided all of the aforementioned recommendations are applied.

4.2.11.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action, with the following exceptions.

Sub-surface soils at the current location of the softball fields contain elevated levels of contaminants and it is not anticipated that the construction of the relocated running track would contribute to further contamination. Placing the running track and surrounding vegetative groundcover over the existing contaminated soils would limit the potential for exposure to these soils.

4.2.11.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.11.4 No-Action Alternative

Under the No-Action Alternative, there would be no change from the baseline conditions described in Section 3.3.11. Therefore, there would be **no impact** to geological resources or soils if the No-Action Alternative were selected.

4.2.12 Environmental Justice

4.2.12.1 Proposed Action

There are no minority or low-income populations at Scott AFB; therefore, implementation of the Proposed Action would have **no impact** to minority or low-income populations.

4.2.12.2 Alternative A

Impacts for Alternative A are the same as those for the Proposed Action.

4.2.12.3 Alternative B

Impacts for Alternative B are the same as those for the Proposed Action.

4.2.12.4 No-Action Alternative

Under the No-Action Alternative, there would be no change from the baseline conditions described in Section 3.3.12. Therefore, implementation of the No-Action Alternative would have **no impact** to minority or low-income populations.

4.2.13 Indirect and Cumulative Impacts

A cumulative impact, as defined by the CEQ (40 CFR 1508.7), is the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

As described in Section 2.5, other proposed actions are foreseeable at Scott AFB. These actions are not directly related to the proposed or alternative actions evaluated in this EA. This EA addresses the environmental impacts of these other actions only in the context of potential cumulative impacts, if any. Actions considered for cumulative effects are listed below:

- Widening of Ward Street to three lanes.
- Construction of a three-story, 210,000 square foot Headquarters Joint Use Administrative facility to consolidate personnel from headquarters AMC and headquarters TRANSCOM. Buildings 1910 and 1911 will be demolished prior to construction of this facility.
- Construction of an addition to the Network Communications Center (Building 1575) and construction of a new Distribution and Deployment Planning Center on the site of Building 1521.
- Construction of an Enlisted Dormitory adjacent to existing dormitories. This facility will replace the currently substandard Building 1912.
- Construction of a Child Development Center in the Patriots Landing housing area to replace the existing Child Development Center adjacent to the hospital.
- Construction of a 21,000 square foot C-40 Squadron Operations facility in the area south of the fire station on the west side of the flightline.
- Relocation of the refueler truck parking area to the southern flightline.
- Renovation of the first floor of the Steam Plant.
- Demolish Building 1970 and construct a new Security Forces building on the southern flightline.
- Construction of a 14,000 square foot Medical War Reserve Material Warehouse in the southern portion of the Warehouse District.

Air Quality

Construction of temporary and permanent facilities at Scott AFB under the proposed and alternative actions would result in **short-term** emissions during construction activities. The emissions would be temporary and would be eliminated after construction is completed. **Minor long-term** increases in air emissions for NO_x, VOC, and CO would be expected as a result of motor vehicles operated by the 164 inbound personnel; however, this increase is expected to be negligible when compared to overall regional motor vehicle emissions.

The Air Force proposes to conduct six other construction projects, one renovation project, and one demolition project during the same period as construction under the proposed and alternative actions. Air emissions from these other construction projects are also primarily **short-term** in nature and are associated with construction activities.

The cumulative effects from all of the proposed construction projects are expected to have little impact when compared to the total emissions for the St. Louis Standard Metropolitan Statistical Area. (AQCR #070).

Noise

Noise impacts associated with the proposed and alternative actions at Scott AFB are **short-term** in nature and, therefore, would not accumulate over time or contribute to cumulative noise effects.

Wastes, Hazardous Materials and Stored Fuels

The proposed and alternative actions would require the management of potentially contaminated soils. Management of this soil would follow appropriate Scott AFB, state, and federal regulations and would result in **no adverse impacts**. Therefore, the proposed and alternative actions would not contribute to cumulative effects to wastes, hazardous materials, and stored fuels in or around Scott AFB. Although the proposed and alternative actions are not expected to encounter LBP and ACM at construction sites, other concurrent facility construction activities would have the potential to encounter LBP and ACM.

Water Resources

Surface water management presents the main issue of concern associated with the proposed and alternative actions. In the short-term, excavation and construction would require engineering controls to address sediment loadings and runoff. Groundwater would not be encountered during construction activities. Other projected construction activities at Scott AFB would potentially require engineering controls; therefore, construction activities under the proposed and alternative actions would contribute to cumulative impacts.

Biological Resources

No significant or unique biological resources were identified at the proposed or alternative project sites; therefore, the proposed and alternative actions would not contribute to cumulative effects to biological resources at or around Scott AFB.

Socioeconomic Resources

The proposed and alternative actions are expected to cause **no long-term adverse impacts** to population, housing, education, or economy. In addition, none of the other projects scheduled to occur during the same time as the proposed and alternative actions would contribute to a change in population or school enrollment. Construction of an enlisted dormitory is expected; however, this would not impact MFH or available off-base housing. Also, projects occurring during the

same time period as the proposed and alternative actions would contribute positive impacts to the economy through expenditures in the local area.

Land Use

Implementation of the proposed and alternative actions would result in land use changes but would have **no impacts** to land use (Rodriguez 2006). It is likely that land use changes would also result from implementation of other projected construction activities at Scott AFB occurring at the same time as the proposed and alternative actions. Therefore, the proposed and alternative actions would not contribute to cumulative effects to land use changes at Scott AFB.

Utilities and Transportation Systems

Minor short-term and long-term increased solid waste generations resulting from construction and 164 inbound personnel under the proposed and alternative actions would contribute to the cumulative increase in solid waste generation from other concurrent construction activities at Scott AFB.

Short-term increases in soil erosion and sediment loadings in storm water runoff resulting from the proposed and alternative actions would contribute slightly to cumulative effects of other concurrent construction activities at Scott AFB.

Heavy equipment traffic resulting from the proposed and alternative actions, along with increased heavy equipment traffic from other concurrent construction activities has the potential to cause damage to roadways not designed to support continued heavy equipment traffic for an extended period. The widening of Ward Street to three lanes could potentially contribute to traffic congestion at the Ward Drive/West Winters Street intersection. **Minor long-term** increases in traffic counts on the installation and in the local area resulting from the addition of 164 inbound personnel and their families under the proposed and alternative actions would contribute to increased traffic counts from other concurrent construction activities.

Minor long-term increases in electric/natural gas consumption resulting from the proposed and alternative actions would contribute to the cumulative increase in electric/natural gas consumption associated with concurrent construction of other facilities at Scott AFB. The addition of 164 personnel and their families would also result in **minor long-term** increases in overall residential electrical and natural gas consumption in the area.

In addition, under the proposed and alternative actions, **minor long-term** increases in residential electric/natural gas consumption in the local area resulting from 164 inbound personnel and their families would contribute to increases in total area electric/natural gas consumption from concurrent construction of other on-base facilities.

Safety and Occupational Health

No impacts to construction workers are expected as a result of implementation of the proposed and alternative actions; therefore the proposed and alternative actions would not contribute to cumulative effects to safety and occupational health at Scott AFB.

Environmental Management – Pollution Prevention

Short-term increases in recyclable asphalt **long-term** increases in recyclable administrative materials resulting from the proposed and alternative actions would contribute to the overall increase in recyclable asphalt associated with concurrent construction activities.

In addition, **long-term** increases in recyclable administrative materials resulting from the proposed and alternative actions would contribute to the overall increase in recyclable administrative materials associated with concurrent construction activities.

Geology and Soils

The proposed and alternative actions would have **no adverse impacts** to soils or geological resources in or around Scott AFB. Short-term construction activities would require erosion control measures and acquisition of Phase I and II NPDES permits. Excavation of soil would have **no impact** to the surrounding area; therefore, the proposed and alternative actions would not contribute to cumulative effects to geology and soils at or around Scott AFB.

Environmental Justice

Since there are no environmental justice communities at the project sites, the impacts associated with the proposed and alternative actions would not disproportionately affect minority or low-income areas or contribute to negative cumulative effects for environmental justice populations.

4.2.14 Unavoidable Adverse Impacts

4.2.14.1 Proposed Action

There are several short-term and long-term unavoidable minor adverse impacts summarized in Table 2-1; however, there would be **no unavoidable significant adverse impacts** if the Proposed Action were implemented. Potential impacts include those to air quality, noise, surface water quality, socioeconomics, utilities and transportation, and environmental management – pollution prevention.

4.2.14.2 Alternative A

There are several short-term and long-term unavoidable minor adverse impacts summarized in Table 2-1; however, there would be **no unavoidable significant adverse impacts** if Alternative A were implemented. Potential impacts include those to air quality, noise, surface water quality, socioeconomics, utilities and transportation, safety and occupational health, and environmental management – pollution prevention.

4.2.14.3 Alternative B

There are several short-term and long-term unavoidable minor adverse impacts summarized in Table 2-1; however, there would be **no unavoidable significant adverse impacts** if Alternative B were implemented. Potential impacts include those to air quality, noise, surface water quality,

socioeconomics, utilities and transportation, and environmental management – pollution prevention.

4.2.14.4 No-Action Alternative

There are several long-term unavoidable minor adverse impacts summarized in Table 2-1; however, there would be **no unavoidable significant adverse impacts** if the No-Action Alternative were implemented. Potential impacts include those to hazardous materials and socioeconomics.

Chapter 5

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Chapter 6

List of Preparers

CHAPTER 6 LIST OF PREPARERS

| Name/Organization | Degree | Resource Area | Years of Experience |
|------------------------------|---|---|----------------------------|
| Paige Rhodes/WESTON | BS, Biology; MS, Environmental Science | Project Manager; Public Involvement; Resource Lead, Socioeconomics | 14 |
| Carlton Hendrix/WESTON | BS, Environmental Engineering; MS Civil Engineering | Deputy Project Manager; Resource Lead, Air Quality | 8 |
| Tamara Carroll/WESTON | BS, Bioenvironmental Science | Resource Specialist, Air Quality, Noise, Socioeconomic Resources, Utilities and Transportation Systems | 4 |
| Michelle Weiszbrod/WESTON | BS, Biochemistry | Resource Specialist, Waste, Hazardous Materials and Stored Fuels, Safety and Occupational Health, Geology and Soils | 10 |
| Jennifer Peters/WESTON | BS, Geography | Resource Specialist, Water Resources | 5 |
| Chris Douglas/WESTON | BS, Biology | Resource Lead, Biological Resources | 14 |
| Elisa Morales/WESTON | BS, Biology | Resource Specialist, Socioeconomic Resources, Land Use, Environmental Management – Pollution Prevention, Environmental Justice | 3 |
| John Koerner/WESTON | BA, Geography; MA, Physical Geography | Quality Assurance/Quality Control; Senior Technical Review | 35 |
| Kathleen Mooney/WESTON | BS, Biology; MS, Environmental Science | Resource Lead, Waste, Hazardous Materials and Stored Fuels; Safety and Occupational Health | 17 |
| Brenda Busselman/WESTON | -- | Document compilation, formatting | 16 |

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Chapter 7
List of Persons and Agencies
Consulted

CHAPTER 7

LIST OF PERSONS AND AGENCIES CONSULTED

Federal Agencies

Scott Air Force Base, Illinois
Mackiewicz, Michael (375 CES/CEVA)
Randall, Ty (375 CES/CECP)
Rodriguez, Andreas (375 CES/CEV)
Tutterow, Brian (SAIC)
Varilek, Brandon (375 CES/CECP)

Illinois State Agencies

Illinois Environmental Protection Agency
Boarman, Luttie

Other Agencies and Individuals

Belleville Public Library
Burrack, Kendra (Director)

Scott Air Force Base Library
Koontz, Sandy (Director)

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Appendix A

Interagency/Intergovernmental Coordination

Draft EA Letter



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 375TH AIRLIFT WING (AMC)

17 Mar 06

Mr. Andreas Rodriguez
Chief, Environmental Compliance
375 CES/CEV
702 Hangar Road, Building 56
Scott AFB IL 62225-5035

Ms. Luttie Boarman
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Belleville, IL 62220

Dear Ms. Boarman

Enclosed for your review and comment is the Draft Environmental Assessment (EA) for the construction of three facilities: Phase I of the United States Army Surface Deployment and Distribution Command Transportation Command (TRANSCOM) and Phases I and II of the Mobility Air Force Logistics Support Center (MAF LSC) at Scott Air Force Base (AFB), Illinois. The Air Force is proposing construction of the facilities to accommodate the arrival of military personnel in support of Base Realignment and Closure requirements for Scott AFB. The overall purpose of the project is to provide adequate administrative space for incoming personnel while consolidating the arriving forces with complimentary forces already stationed at Scott AFB.

The Draft EA describes and analyzes alternative plans for the construction of the facilities including the No-Action Alternative, under which the construction of the facilities would not occur. The EA also describes and analyzes 164 inbound personnel associated with the MAF LSC.

We request your participation in the process, and solicit any comments or concerns you may have on the Draft EA. Please send your comments to me at the above address by 21 April 2006.

Thank you for your assistance in this matter. If there are any questions, please contact me at 618-256-2192.

Sincerely

Andreas M. Rodriguez
ANDREAS M. RODRIGUEZ, GS-12, DAF

Enclosure



Draft EA Responses

No comments were received during the public comment period.

Appendix B

Public Involvement

PUBLIC NOTICE

THE UNITED STATES AIR FORCE AIR MOBILITY COMMAND (AMC)

Invites PUBLIC COMMENT

ON THE DRAFT ENVIRONMENTAL ASSESSMENT AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT FOR PHASE I UNITED STATES ARMY SURFACE DEPLOYMENT AND DISTRIBUTION COMMAND TRANSPORTATION COMMAND CONSOLIDATION AND PHASE I AND II MOBILITY AIR FORCE LOGISTICS READINESS SQUADRON

The 375th Mission Support Group, Scott Air Force Base (AFB), Illinois, invites public comment on the Draft Environmental Assessment (EA) and draft proposed Finding of No Significant Impact (FONSI) for the proposed construction of one permanent facility and two temporary facilities at Scott AFB, Illinois. The EA, prepared in accordance with the National Environmental Policy Act and Air Force instructions, evaluates potential impacts of the proposed and alternative actions, including the No-Action Alternative, on the environment. The EA evaluated: air quality; noise; wastes, hazardous material, and stored fuels; water resources; biological resources; socioeconomic resources; land use; utilities and transportation systems; safety and occupational health; environmental management-pollution prevention; geology and soils; and environmental justice. Based on the EA, the Air Force has prepared a draft proposed FONSI.

Copies of the Draft EA and draft proposed FONSI are available at the Belleville Public Library, 121 East Washington Street, Belleville, IL 62220 (618-234-0441); and Scott AFB Library, 510 Ward Drive, Building 1940, Scott AFB, IL 62225 (618-566-2562).

Comments may be submitted through 21 April 2006 and submitted to 375th Airlift Wing, Public Affairs Office, FAX (618) 256-8837, 375AW.PA@SCOTT.AF.MIL.

PRIVACY ADVISORY NOTICE

Your comments on this Draft Environmental Assessment (EA) are requested. Letters or other written comments provided may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided will be kept confidential. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and their specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

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Appendix C

Air Pollutant Emissions Calculations

| Facility Construction | Area (SF) | Stories | Total Emissions (tons) | | | | |
|--------------------------------------|-----------|-------------------|------------------------|--------|--------|-------|------------------|
| | | | CO | VOC | NOx | SOx | PM ₁₀ |
| Phase I SDDC TRANSCOM Temp Facility | 165,000 | 2 | 6.962 | 1.121 | 16.021 | 1.693 | 1.067 |
| Phase I MAF LSC Temp Facility | 20,000 | 1 | 0.863 | 0.144 | 1.964 | 0.210 | 0.129 |
| Phase II MAF LSC Permanent Facility | 33,000 | 1 | 1.424 | 0.238 | 3.241 | 0.346 | 0.212 |
| Pavement Construction | Area (SF) | Depth (in) | | | | | |
| Phase I SDDC TRANSCOM Parking Lot | 210,000 | 6 | 0.832 | 18.041 | 0.228 | 0.022 | 0.017 |
| General Site Preparation/Disturbance | Area (SF) | Duration (months) | | | | | |
| Phase I SDDC TRANSCOM Temp Facility | 82,500 | 9 | | | | | 4.91 |
| Phase I MAF LSC Temp Facility | 20,000 | 6 | | | | | 0.79 |
| Phase II MAF LSC Permanent Facility | 33,000 | 18 | | | | | 3.93 |
| Phase I SDDC TRANSCOM Parking Lot | 210,000 | 9 | | | | | 12.50 |
| TOTAL | | | 10.08 | 19.54 | 21.45 | 2.27 | 23.55 |

| AIR EMISSIONS OVER PROJECTED CONSTRUCTION SCHEDULE | | | | | | | |
|--|-----------------------------------|------------------------|--------|--------|--------|------------------|------------------|
| Month | Activity | Total Emissions (tons) | | | | | PM ₁₀ |
| | | CO | VOC | NOx | SOx | PM ₁₀ | |
| May-06 | Ph I MAF LSC | 0.1438 | 0.0240 | 0.3274 | 0.0349 | 0.1537 | |
| Jun-06 | Ph I MAF LSC | 0.1438 | 0.0240 | 0.3274 | 0.0349 | 0.1537 | |
| Jul-06 | Ph I MAF LSC | 0.1438 | 0.0240 | 0.3274 | 0.0349 | 0.1537 | |
| Aug-06 | Ph I MAF LSC | 0.1438 | 0.0240 | 0.3274 | 0.0349 | 0.1537 | |
| Sep-06 | Ph I MAF LSC & Ph I SDDC TRANSCOM | 1.0098 | 2.1531 | 2.1328 | 0.2255 | 2.2080 | |
| Oct-06 | Ph I MAF LSC & Ph I SDDC TRANSCOM | 1.0098 | 2.1531 | 2.1328 | 0.2255 | 2.2080 | |
| Nov-06 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| Dec-06 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| Jan-07 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| Feb-07 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| Mar-07 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| Apr-07 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| May-07 | Ph I SDDC TRANSCOM | 0.8660 | 2.1291 | 1.8054 | 0.1906 | 2.0543 | |
| Jun-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Jul-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Aug-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Sep-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Oct-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Nov-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Dec-07 | None | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | |
| Jan-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Feb-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Mar-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Apr-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| May-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Jun-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Jul-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Aug-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Sep-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Oct-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Nov-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Dec-08 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Jan-09 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Feb-09 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Mar-09 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Apr-09 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| May-09 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| Jun-09 | Ph II MAF LSC | 0.0791 | 0.0132 | 0.1801 | 0.0192 | 0.2300 | |
| TOTAL | | 10.08 | 19.54 | 21.45 | 2.27 | 23.55 | |

| | Total Projected Emissions (tpy) | | | | | PM _{2.5} |
|----------------------|---------------------------------|------|-----|-----|------------------|-------------------|
| | CO | VOC | NOx | SOx | PM ₁₀ | |
| CY 2006 | 4.3 | 8.7 | 9.2 | 1.0 | 9.1 | 9.1 |
| CY 2007 | 4.3 | 10.6 | 9.0 | 1.0 | 10.3 | 10.3 |
| CY 2008 | 0.9 | 0.2 | 2.2 | 0.2 | 2.8 | 2.8 |
| CY 2009 | 0.5 | 0.1 | 1.1 | 0.1 | 1.4 | 1.4 |
| De Minimus Threshold | 100 | 50 | 100 | - | - | |

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